

MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS-1963-A

AD-A171 825



FINAL REPORT

Archaeological and Historic Cultural Resources Inventory for a Proposed Flood Control Project at Halstad, Norman County, Minnesota

Contract #DACW37-81-M-2476

Prepared for:

St. Paul District, Corps of Engineers St. Paul, Minnesota

Prepared by:

HISTORICAL AND ARCHAEOLOGICAL SURVEYS, INC. 1702 Dyke Avenue Grand Forks, ND 58201 (701) 772-6381

With contributions by:

James C. Dahlberg,
Wayne R. Roberson, and
Subcontractor:
Dr. Norene Roberts
Historical Research, Inc.
5406 Penn Avenue South
Minneapolis, MN 55419

Edited by:

Michele H. Schreiner

This document has been approved for public release and sale; its distribution is unlimited.

Kent N. Good, Principal Investigator

DTIC FILE COPY

21 May 1982

ELECTE SEP 1 7 1986

86-9-16-196

DISCLAIMER NOTICE

THIS DOCUMENT IS BEST QUALITY PRACTICABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

	Unclassified	
FCLIRITY	CLASSIFICATION OF THIS PAGE	•

AD-A17/825

REPORT	DOCUMENTATIO	N PAGE			Form Approved OMB No 0704-0188 Exp Date Jun 30, 198		
1a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED	1b. RESTRICTIVE MARKINGS						
2a. SECURITY CLASSIFICATION AUTHORITY	 	3. DISTRIBUTION					
2b. DECLASSIFICATION/DOWNGRADING SCHEDU	Approved for public release; distribution unlimited.						
4. PERFORMING ORGANIZATION REPORT NUMB	5. MONITORING	ORGANIZATION	N REPORT NU	JMBER(S)			
6. NAME OF PERFORMING ORGANIZATION Historical & Archaeological Surveys, Inc.	7a. NAME OF MONITORING ORGANIZATION U.S. Army Engineer District, St. Paul						
6c. ADDRESS (City, State, and ZIP Code)	<u> </u>	7b. ADDRESS (Ci	=				
1702 Dyke Ave. Grand Forks, North Dakota, 582	201		O & Custor , Minnesor		l-1479		
8a. NAME OF FUNDING /SPONSORING ORGANIZATION	8b. OFFICE SYMBOL (If applicable)	9. PROCUREMEN	T INSTRUMENT	IDENTIFICAT	ION NUMBER		
ORGANIZATION	(II applicable)	DACW37-81-M	I-247 <u>6</u>				
8c. ADDRESS (City, State, and ZIP Code)		10. SOURCE OF		ننج سيار سيان			
		PROGRAM ELEMENT NO.	PROJECT NO.	NO.	WORK UNIT ACCESSION N		
13a. TYPE OF REPORT 13b. TIME C FROM 16. SUPPLEMENTARY NOTATION 17. COSATI CODES FIELD GROUP SUB-GROUP	TO 18. SUBJECT TERMS ARCHAEOLOGY	14. DATE OF REPO 1982, May 2	1		PAGE COUNT 184 by block number)		
FIELD GROUP SUB-GROUP	MINNESOTA FLOOD CONTR						
19. ABSTRACT (Continue on reverse if necessary A cultural resources inventor at Halstad, Minnesota was concerned to the control of the contr	and identify by block ory of proposed onducted in 1981 or the existing lere located, and the proposed rules to avoid all tery by implement	flood control. One previlevee right-of these, tright-of-way cultural respections	ously reco f-way line hree (Sout lines. Re ource site	orded pre e. Four p th Cemete ecommenda es withir	ehistoric site previously ery, Homestead, ations include: n the right-of-		
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT UNCLASSIFIED/UNLIMITED SAME AS 223. NAME OF RESPONSIBLE INDIVIDUAL	RPT. DTIC USERS	21. ABSTRACT SE Unclassif	ied		FEICE SYMBOL		
Jean M. Schmidt		612-725-5		IM-C			

ABSTRACT

A cultural resource inventory of proposed flood control right-of-way lines and areas at Halstad, Minnesota, was conducted by Historical and Archaeological Surveys Inc., for the St. Paul District, Corps of Engineers (Contract #DACW3, 81-M-2476). Literature and records search and review, pedestrian survey, and shovel testing were completed in September and October 1981.

One previously recorded prehistoric cultural resource site, Riverside, is located within the existing levee right-of-way line. No properties in or around Halstad are listed on the National Register of Historic Places, therefore, no currently listed properties will be affected by proposed flood control measures. Four previously unrecorded historic cultural resource sites were recorded during conduct of the 1981 pedestrian survey; South Cemetery, Homestead, Log Building, and Potato House. Of these, three are within proposed right-of-way lines and areas, and one (Potato House) is not within any proposed flood control line or area.

Thirteen shovel tests were performed at the Riverside site, eight at the Log Building site, and three at the Homestead site. No cultural material was recovered from any of these tests. Since the Potato House site will not be affected by any proposed flood control measures, it was not tested. Shovel tests were inappropriate at the South Cemetery site.

The Potato House site will not be affected by any proposed flood control measures. The South Cemetery will be affected unless a cemetery bypass is implemented in the new levee line proposed immediately northeast of Halstad city limits. The Riverside site will be affected if modifications and improvements to the existing levee west of Halstad are implemented, and/or if the holding pond location proposed for that area is chosen. However, the Log Building site will be affected if the existing levee loop realignment is chosen rather than modifications and improvements to the existing levee. The Homestead site will be affected by the proposed new levee east of Halstad; there is no alternate for this area.

Recommendations include: 1) modify flood control plans to avoid all cultural resource sites within proposed flood control right-of-way lines and areas; 2) avoid the South Cemetery by implementing the cemetery bypass--putting the new levee on the south side of the section line road in that vicinity, and 3) conduct further cultural resource research at any site that cannot be avoided by proposed flood control measures.



MANAGEMENT SUMMARY

Cultural resources reconnaissance survey and historic documents research were undertaken at Halstad, Norman County, Minnesota, to assist in planning for proposed flood control measures in and around Halstad. The Scope of Work (Appendix I) outlines the legal mandates requiring this study and gives the specifications for conducting this study.

Sponsor of the project is the St. Paul District, Corps of Engineers (COE). Contractor is Historical and Archaeological Surveys, Inc. (HASI) of Grand Forks, North Dakota. Contract DACW37-81-M-2476, for \$1,485.00, was awarded on 28 August 1981.

Field reconnaissance was done on 26 September 1981 by HASI archaeologists Kent Good and Jeff Kinney. Archaeologists James Dahlberg and Wayne Roberson conducted subsurface shovel tests on 26 October 1981. The field report and analysis of data was begun 28 September 1981 in HASI's main laboratory and office in Grand Forks. Site form preparation, drafting, and procedures for the final report were also begun at that time. Site files and records, and historic document searches were begun in mid-September 1981 at the Minnesota Historical Society (MHS), and were conducted by Dr. Norene Roberts—President of Historical Research, Inc. (HRI), Minneapolis, MN—under subcontract to HASI. Roberts supplied copies of potentially pertinent articles and a list of potentially pertinent references (see Appendix II for materials supplied by HRI). National Register of Historic Places (NRHP) files were checked by Roberts on 8 October 1981. There are no currently listed NRHP properties within or in the immediate vicinity of Halstad, Minnesota.

One previously recorded archaeological site, 21NR29, lies within the existing levee right-of-way (ROW) line (Figure 4, page 49). The record of this site was not in the files at the time of the files search at MHS, and therefore was not noted by HRI during the files search. Consequently, HRI was not aware of the report dealing with the site, and HASI recorded the site as a previously unrecorded resource during their pedestrian investigation. This resulted in some confusion until the matter was cleared through communications with the site's original recorder--Professor Michael Michlovic, Moorhead State University, Moorhead, Minnesota--(Michlovic 1981d), and through the process of assignation of a Smithsonian Institution Trinomial System (SITS) number to the site by MHS.

Field reconnaissance was hampered by light precipitation and muddy fields. Vegetation height was not a problem in most places in the ROW lines and areas; the grass on the existing levee is mowed regularly by the city of Halstad, and was not tall.

The study resulted in discovery of three historic cultural resource sites (21NR39H, 21NR42H, and 21NR43H) within proposed ROW lines and areas, and an additional historic site (21NR40H) which is not within any proposed Halstad flood control ROW (Figure 4, page 49). One prehistoric (aboriginal) site (21NR29) was recorded within ROWs (Figure 4, page 49); it was learned later that this site had been recorded previously.

All five cultural resource sites are described in the Investigation Results (Chapter 8., page 47), and MHS site forms for each cultural resource are included as Appendix III.

The significance of the three historic sites is local and regional, and not considered to be of national consequence by HASI. The aboriginal site (21NR29) is possibly of regional and state-wide prehistoric significance. One historic site (Log Building, 21NR42H) is of some architectural importance because of the scarcity of such structures still intact in the region; however, the structure is modified and not in its original condition or its original location. Documentary research revealed no details of the "creamery" structure shown near the location of site 21NR42H (Log Building site) on a 1910 plat map.

Recommendations are detailed later in this report (Chapter 10., page 65). Summary recommendations include the following.

- Modify flood control plans to avoid all cultural resources within the ROW lines and areas.
- 2) Avoid South Cemetery by putting the new levee on the south side of the section line road in this vicinity.
- 3) Conduct further cultural resources research. At the:
 - A. South Cemetery site: Compile sufficient documentary data to see if nationally prominent persons are buried here. Subsurface archaeological investigations are neither feasible, nor warranted.
 - B. Homestead site: Conduct sufficient documentary research to see if "significant persons" resided at this place. Subsurface archaeological investigations do not appear necessary because of the disturbed nature of surface deposit, and the lack of obvious architectural features.
 - C. Log Building site: Conduct sufficient documentary research to see if "significant persons" or "significant events" were associated with the site or its features. The building should be documented photographically and with measured sketches if it is to be destroyed in place. Subsurface archaeological investigations are not warranted because the log structure apparently was not located originally at this site.

which was and the property of the party of t

D. Riverside (aboriginal artifact scatter) site: Conduct subsurface archaeological tests to delimit the prehistoric deposit—if any—and to determine the nature of the deposit.

1.5

All observed cultural material was collected from the surface at the Riverside site (21NR29). These materials were held at HASI's laboratory in Grand Forks for analysis, and now are curated at MHS (see Appendix IV for correspondence regarding this agreement).

TABLE OF CONTENTS

														Page
ABST	RACT		•	•		•	•	•	•		•	•	•	iii
MANA	GEMEN	T SUMMARY	•	•		•	•	•	•		•	•		v
LIST	OF T	ABLES .				•	•				•	•		хi
		IGURES	•			•	•	•			•	•		хi
		LATES .		_	_	-	_	_			_			xii
	0	•	•	•	•	•	•	•	•	•	•	•	•	~~~
						-		-						
1.	INTR	ODUCTION	•	•	•	•	•	•	•	•	•	•	•	1
2.	PREV	TOUS ARCH	AEOL	GIC	AL A	ND H	ISTO	RICAI	ST	UDIE	s	•	•	9
3.	ENVI	RONMENTAL	SET	ring	•	•		•	•	•	•	•		15
	3.1	Geology			•	•		•		•				15
		Soils	_	•	•		•	•			•	•		16
	3.3	Climate	•	•	•	•	•	•	_	_		•	-	16
		Fauna	•	•	•	•	•	•	•	•	•	•	•	16
		Flora	•	•		•	•	•	•	•	•	•	•	17
4.	REGI	ONAL HUMAI	N 0C0	CUPA	rion	•		•		•	•	•	•	23
	4.1 4.2	Prehistor Historic					n the	• e	•	•	•	•	•	23
		Red River												28
	4.3	Euro-Amer		_		nce :	into	the	Are	a	•	•	•	31
5.	THEO	RETICAL A	ND MI	ETHOI	DOLO	GICA	L OVI	ERVII	ew	•	•	•	•	37
6.	LITE	RATURE ANI	D REC	CORDS	S SE	ARCH	AND	REV	EW	•		•	•	39
7.	FIEL	D METHODS	•		•	•				•		•	•	41
														4-
8.	INVE	STIGATION	RESU	JLTS	•	•	•	•	•	•	•	•	•	47
	8.1	South Cer		-			•	•	•	•	•	•	•	47
	8.2	Homestead					•	•	•	•	•	•	•	51
		Log Build				2H	•	•	•	•	•	•	•	52
		Riverside				•	•	•	•	•	•	•	•	53
	8.5	Potato Ho	ouse	- 2	1 NR 4	OH	•	•	•	•	•	•	•	59
9.	EVAL	UATIONS A	ND C	ONCL	USIO	NS	•	•	•	•	•	•	•	61
10.	RECO	MMENDATIO	NS	•	•	•	•	•	•	•	•	•	•	65
11.	PLAT	ES .	•	•	•	•	•	•	•	•	•	•	•	69
12.	LIST	OF REFER	ENCES	3										77

APPENDIX I

Contract DACW37-81-M-2476 Scope of Work

APPENDIX II

Records and Literature Search and Review Materials

APPENDIX III

Minnesota Historical Society Site Forms

APPENDIX IV

Project Correspondence

APPENDIX V

Shovel Test Forms

APPENDIX VI

Vitae

LIST OF TABLES

TABLE		Page
1.	Vegetation in and around the Study Area near Halstad, Minnesota, Possibly Used by American Indians	21
FIGURE	LIST OF FIGURES	
1.	Study Area Location and Boundaries	3
2.	Halstad, Minnesota: T145N, R48W and R49W Project Survey Area Showing Proposed Flood	5
	Control Measures	5
3.	Survey Methods	43
4.	Five Cultural Resource Sites Recorded and Relationships to Proposed Flood Control Measures	49
5	Showel Most Logations at Site 21NP29	57

LIST OF PLATES

PLATE							Page
1.	South Cemetery (21NR43H) .	•	•	•	•	•	71
2.	Homestead Site (21NR39H) .		•	•	•	•	71
3.	Log Building Site a(21NR42H)	•		•	•	•	73
4.	Riverside Site (21NR29) .	•		•	•	•	73
5	Potato House Site (21NR40H)					•	75

1. INTRODUCTION

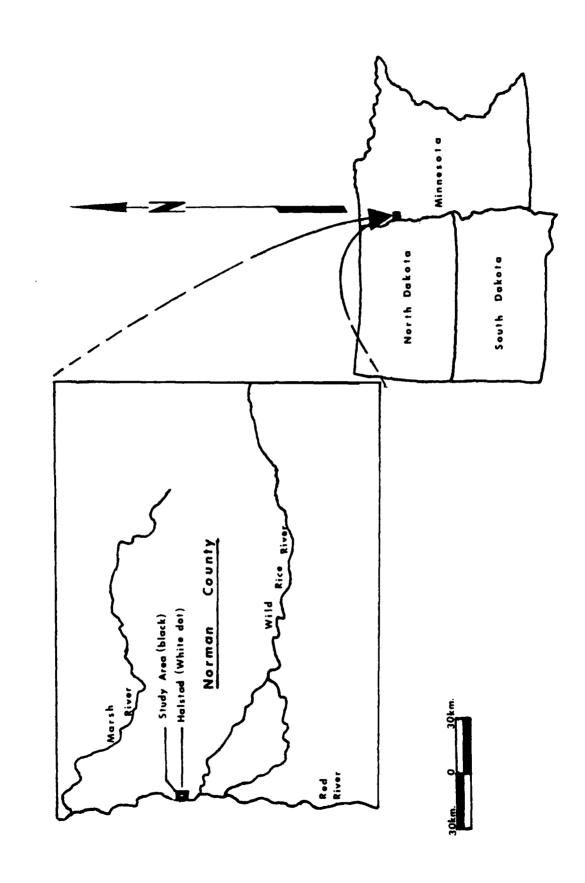
Sponsor of the Halstad Flood Control Project is the St. Paul District, Corps of Engineers (COE). Historical and Archaeological Surveys, Inc. (HASI) conducted a cultural resources reconnaissance survey to assist in COE planning for proposed flood control measures in and around Halstad, Norman County, Minnesota (Sections 19 and 30, T145N, R48W; and Sections 24 and 25, T145N, R49W) (Figures 1 and 2).

The COE proposed construction goals for the project include modification and improvement of the existing ("emergency") levee, which partially encircles the town; construction of a new levee; establishment of as many as three holding ponds, possibly with new berms; and a ditch/pipe interior drainage system leading into the southernmost proposed holding pond (Figure 2) (see Scope of Work Sections 4.02 through 4.08 in Appendix I). COE goals for obtaining a cultural resources reconnaissance survey at Halstad include an inventory of all cultural, resource sites within proposed right-of-way (ROW) lines and areas, and related documentary research and analysis; search of pertinent site form files at the Minnesota State Archaeologist's Office--Minnesota Historical Society (MSAO--MHS) to see if cultural resource sites within proposed ROWs have been previously recorded; search of the National Register of Historic Places (NRHP) records to determine whether NRHP properties lie within ROWs or will be affected by proposed flood control measures; and to obtain professional recommendations as to possible future research or other appropriate action with regard to cultural resources in the project study area.

Previous archaeological and historic studies of the project area and general region were reviewed in various sources (see Chapter 12., List of References, page 77). Repositories of these sources include the MHS, the State Historical Society of North Dakota (SHSND), the University of Minnesota Library, and the University of North Dakota Library. The MSAO was consulted about cultural resource site forms, and the Minnesota State Historic Preservation Office (SHPO) was consulted about possible NRHP property listings in the Halstad area. Historical and archaeological data from HASI's company library in Grand Forks, North Dakota, also were used in preparing overviews and in analysis.

Orientation of the literature review was with the town of Halstad and its cultural/environmental setting in relation to the immediate area. General overviews were compiled to give a rounded picture of the study area within the regional context of geography, prehistory, and history. Literature and documents review was ended in late October 1981, after about 115 person-hours' research previous to compilation of pertinent report chapters.

One aboriginal site (21NR29) was encountered within the Halstad study area (Figure 4, page 49). The site, originally recorded by Michlovic in 1980, has been determined to contain a Late Woodland manifestation with associated Sandy Lake Ware (Michlovic 1981b). Other similar aboriginal sites have been recorded in the immediate vicinity (Michlovic 1981b). Various recent archaeological surveys and



16

E.

FIGURE 1. Halstad Study Area Location and Boundaries.

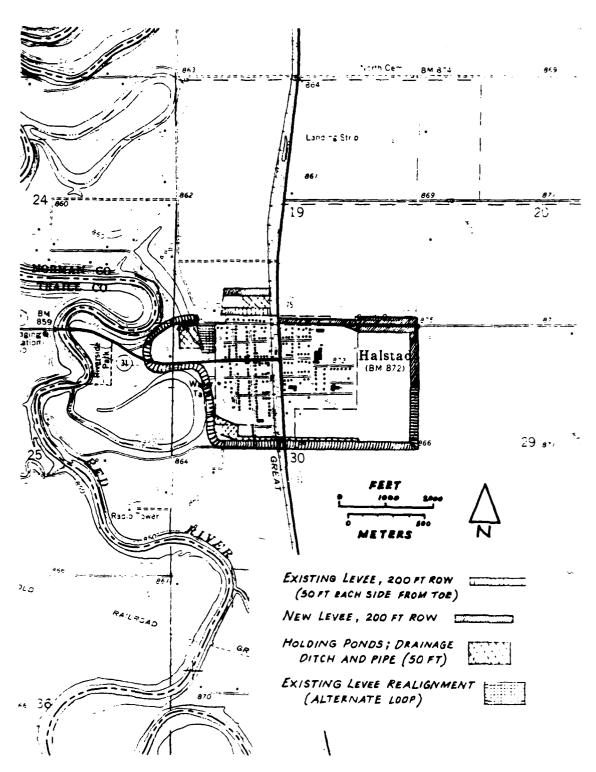


FIGURE 2. Halstad, Minnesota; T145N, R48W and R49W. Project Survey Area, showing proposed flood control measures. (From U.S.G.S. 7.5' topo quad map "Halstad, Minn.-N.Dak." 1963)

excavations conducted by Michlovic (1979, 1981b,c) in Norman and Clay counties indicate that aboriginal peoples may have exploited the middle Red River Valley, at least sporadically, for the past 8,000 to 9,000 years.

Three historic cultural resource sites were recorded in the Halstad flood control project area (21NR39H, 21NR42H, and 21NR43H); an additional historic cultural resource site (21NR40H) was recorded, although it is not located within any proposed flood control area. The lure of free or inexpensive farmland brought settlers to the Halstad area in the early 1870s. The establishment of the community of Halstad was not realized untl 1883, however, with the emergence of the Moorhead and Northern Railway (now a branch of the Burlington Northern).

Geographically, the Halstad area lies in the heart of the Red River Valley. Because of the rich soils that have developed there, the leading industry in the Halstad area has always been agriculture. Today in Norman County, small grains (e.g., wheat, oats, and barley) are grown, as well as corn, sugar beets, and sunflowers. Dairy and beef cattle, hogs, and sheep also are raised.

The Scope of Work which guided the field reconnaissance survey, documentary research, and preparation of this report accompanied the Award of Contract #DACW37-81-M-2476; it is provided in Appendix I. Figures in this report give as complete a locational view as feasible. Photograhic plates (Chapter 11., page 69) are limited to one selected view of each recorded cultural resource site, and are identical to photos submitted on the MHS site forms (included as Appendix III).

Reconnaissance survey was a pedestrian ground surface examination by HASI archaeologists Kent Good and Jeff Kinney, on 26 September 1981. Approximately 23 person-hours were expended conducting fieldwork in the Halstad Flood Control study area. Field notes, negatives of project photographs, and a U.S.G.S. 7.5 minute quadrangle map illustrating site locations were submitted to the COE on 9 November 1981. Related documentary and files research was being conducted simultaneously by HASI archaeologist James Dahlberg and HASI subcontractor Dr. Noreen Roberts-Historical Research, Inc. (HRI), Minneapolis, Minnesota.

Subsurface tests were conducted in the study area on 26 October 1981 by HASI archaeologists James Dahlberg and Wayne Roberson. Twenty-four shovel tests were made; 13 at 21NR29, 8 at 21NR42H, and 3 at 21NR39H. Results of all 24 shovel tests were negative; no subsurface deposits were discovered. The tests are described in the Field Methods (Chapter 7., page 41), and in the Investigation Results (Chapter 8., page 47). Shovel test forms for each of the 24 shovel tests are provided in Appendix V.

Overall purpose of the reconnaissance survey and this report is to provide data on the existence and nature of cultural resources within proposed ROWs, and to make recommendations based on analysis of those data. Data are compiled in logical order, analyzed in proper context, and used to evaluate known cultural resources in relation

to proposed flood control construction measures. Recommendations are made through direct reference to guidelines from the Federal Register (36 CFR 1202.6--1979) concerning criteria for sites possibly eligible for nomination to the NRHP. Final determination of eligibility and initiation of NRHP nomination lies with the SHPO.

2. PREVIOUS ARCHAEOLOGICAL AND HISTORIC STUDIES

As of 1972, the only excavated archaeological sites in Norman County were two Arvilla Complex burial mounds, both professionally excavated by Lloyd Wilford in 1946 (Streiff 1972). The Slininger site (21NR1) is located northwest of Twin Valley, approximately 28 mi. southeast of Halstad, while the Habben site (21NR2) is situated west of Gary, about 22 mi. east of Halstad. A number of prehistoric earthworks were reported in Polk and Norman counties by Winchell (1811), none located closer to Halstad than 30 mi. Most of these earthworks are located on prominent beach strands.

Lloyd Wilford (1945) checked a site lead which reported the presence of a village site at the western end of the bridge over the Red River at Halstad. Stubble fields on both sides of North Dakota Highway 7 were searched with negative results.

Jan Streiff of the University of Minnesota Archaeological Laboratory conducted an archaeological survey of the Twin Valley Flood Control project for the COE in 1974. The survey areas, all within 50 mi. south of Halstad, included portions of Felton Ditch, the South Branch of the Wild Rice River, and the Twin Valley Reservoir on the Wild Rice River. The survey resulted in a single isolated find (Streiff 1974).

Michael Michlovic, Professor of Anthropology at Moorhead State University, has performed a number of cultural resource projects in Norman and surrounding counties. In November 1976, Michlovic conducted a survey of several small areas along the Wild Rice River for a Fargo-based engineering company. All survey areas were within 25 mi. of Halstad, but no closer to HASI's study area than 12 mi. No cultural resources were discovered (Michlovic 1976).

In August 1977, Michlovic (1977) conducted a cultural resource reconnaissance of two proposed bank stabilization construction sites along the Red River in Norman County, and one such construction site along the Wild Rice River in Clay County, Minnesota, for a Fargo-based engineering firm. The two areas along the Red River were approximately 8 mi. north of Halstad, while the area along the Wild Rice River was approximately 20 mi. southeast of Halstad. No cultural materials were discovered (Michlovic 1977).

Michlovic conducted an archaeological survey and testing project of a cultural resource site recorded originally in 1977 and endangered by construction activities associated with the M.B. Johnson Park, in July 1978. The M.B. Johnson Park is located just north of Moorhead, Minnesota, and approximately 34 mi. south of Halstad. The project was conducted for the Parks and Recreation Department of Moorhead. Surface collections from the original recording of the site included historic artifacts (e.g., nails, glass fragments, stoneware fragments, etc.), and prehistoric artifacts (e.g., 34 potsherds—primarily shell-tempered; 1 plain shell-tempered and 1 dentate—stamped rim sherd; chalcedony, chert, quartz, and quartzite flakes; 1 chalcedony end scraper, etc.). Tests were undertaken at the site in 1978 to determine if any portion of

it was to be affected by construction activities at the park. Three tests were performed 120 m east of the known site area, and one test was performed within the known site area. Those tests east of the site did not yield any cultural material; however, the one test within the site area yielded chalcedony flakes, bone fragments, burned bone, and charcoal. Michlovic determined that the historic debris found at the site was not occupational debris, that the site was a prehistoric cultural resource with possible Middle and Late Woodland components, and tentatively identified the ceramic material from the site as Sandy Lake Ware (Michlovic 1978).

A records search for location and documentation of historic and archaeological sites located on or near various waterfowl production areas in 19 counties in Minnesota and 7 counties in Wisconsin was conducted by Richard B. Lane in 1978 for the U.S. Fish and Wildlife Service. Polk (north of Norman County) and Clay (south of Norman County) counties were among the Minnesota counties to be checked for locations of sites during this project. Although Lane's (1978) report lists a number of historic sites (primarily farm buildings) on waterfowl production areas in these two counties, only two prehistoric sites were listed and these were located near waterfowl production areas. A prehistoric mound group is listed near a waterfowl production area in Polk County, approximately 18 mi. north and east of the Halstad study area. The site in Clay County is listed as one prehistoric mound, located approximately 21 mi. southeast of Halstad (Lane 1978).

During the summer of 1978, Michlovic directed an archaeological survey in Clay County (immediately south of Norman County), Minnesota. The survey was part of the Minnesota Statewide Archaeological Survey (MSAS), and was designed "to sample the prehistoric archaeological resources from a portion of the Lake Agassiz lacustrine plains" (Michlovic 1979). Two-hundred, thirty-four survey units were chosen from a random set of plots in four natural strata found bordering on and in the Lake Agassiz Plain. Additional plots were surveyed on an intuitive basis. A single Paleo-Indian (Agate Basin) artifact and three Old Copper artifacts were found during the 1978 Clay County survey. survey also revealed evidence of several post-Archaic Plains cultures, which were represented by large corner-notched and small side-notched projectile points. While no burial mounds were discovered during the survey, Woodland ceramics of various types were found (Michlovic 1979).

In the fall of 1979, a cultural resource investigation of the Wild Rice River - South Branch and Felton Ditch flood control areas in Norman and Clay counties was conducted by Kathleen A. Roetzel and Michael A. Eigen for the COE. Halstad is located approximately 12 mi. northwest of the northernmost edge of Roetzel and Eigen's study area, which extended southeast from that point. Although approximately 65.5 miles were surveyed along the South Branch of the Wild Rice River and Felton Ditch, and 104 shovel tests were performed; no cultural material was found during pedestrian survey investigation, nor did shovel tests yield any cultural material (Roetzel and Eigen 1980).

Michlovic directed an archaeological survey and excavation project along the Red River floodplain in Norman County, during the 1980 to 1981 field season (Michlovic 1981b). This project was an outgrowth of the MSAS project (described above), which was developed to sample the Lake Agassiz lacustrine plain (Michlovic 1979). Prior to Michlovic's 1980 survey, 10 sites had been recorded for all of Norman County, 9 of which were situated on Lake Agassiz beaches (Michlovic 1981c). Twentyeight previously unrecorded sites and two find spots were recorded, and the sites given site numbers during the 1980 survey along the Red River in Norman County (Michlovic 1981b). One of these sites, 21NR29, was recorded in the NE1/4 SW1/4 NE1/4 and the SE1/4 NW1/4 NE1/4 and the NE1/4 NE1/4 NE1/4 and the SW1/4 NE1/4 NE1/4 of Section 25, T144N, R49W (MSAO--MHS site files). HASI staff discovered that the form should have read T145N. This matter has been cleared with the MSAO--MHS (O'Connell 1981), and the corrected location is now on file. Site 21NR29 is located in the HASI study area at Halstad (Figure 4, page 49).

Michlovic's 1980 crew collected cultural debris from an area totaling approximately 40 ac. at site 21NR29 (site form on file at MSAO--MHS). The debris collected in 1980 consisted of 42 ceramic sherds and 4 pieces of lithic material (Michlovic 1981b). The original site form for 21NR29 records finding a broken corner-notched projectile point made of quartzite. In his preliminary report on the 1980 Norman County survey, Michlovic (1981b) records finding a corner-notched projectile point during the survey but does not specify from which site it was collected. The ceramics analyzed from the 1980 collection from site 21NR29 were dominated by grit-tempered sherds with either cordmarked or plain surfaces. Shell-tempered, cord-marked sherds were also found. These ceramics are felt to represent Sandy Lake Ware of the Late Woodland Period (Michlovic 1981b,c,e). The ceramics found at 21NR29 by HASI crew members in 1981 appear to fall within the Sandy Lake Ware typology (see Riverside Site - 21NR29 discussion in the Investigation Results, Chapter 8., page 47). The presence of a corner-notched projectile point within the site's boundaries potentially represents a second cultural occupation. This possibility creates strong reason to extensively test the subsurface characteristics of this site if it is to be disturbed.

Michlovic's 1980 field crew recorded and received site numbers for three archaeological sites located outside of, but within 1.5 mi. north of, HASI's 1981 survey area (Figure 2, page 5). Site 21NR30 is located in the northern-most portion of Section 24 and extends into the southern half of Section 13, T145N, R49W. Site 21NR31 is located in the northern half of Section 24, while site 21NR32 is situated in the southeast corner of Section 13, both in T145N, R49W (site forms filed at All three sites were represented by small quantities of MSAO--MHS). ceramic sherds (ranging from 3 to 12 in number) and a few pieces of lithic material (Michlovic 1981b). The ceramics are from the Late Woodland Period and are consistent with descriptions for Sandy Lake Ware (Michlovic 1981b,e). The area in which cultural material was found at these three sites was much smaller than that at site 21NR29, and ranged between 2.5 ac. and 5.0 ac.

Four more archaeological manifestations were recorded by Michlovic's 1980 crew, but they had not received site numbers at the writing of this report. These four areas are all located along the Red River in Section 24, T145N, R49W, and are within 1 mi. north of HASI's 1981 survey area (Michlovic 1981e). No data is available presently on the characteristics of these sites.

Michlovic did not test any of the sites recorded in his Halstad study area, and mentioned above (Michlovic 1981e).

During the 1980 field season, Michlovic tested an undisturbed portion of archaeological site 21NR11, located approximately 18 mi. south of Halstad. Presence of the site was indicated by surface finds from a cultivated field. The subsurface test of the site revealed the presence of an undisturbed Late Woodland Period manifestation, concentrated from 10 cm to 30 cm below surface. Ceramics, probably Sandy Lake Ware, were associated with this manifestation (Michlovic 1981b).

A second archaeological site (21NR9) that had been recorded previously was chosen for testing in 1980 (Michlovic 1981b). This site is located on a loop of the Red River near the community of Hendrum, Minnesota, approximately 7 mi. south of Halstad. A Late Woodland Period component, affiliated with Sandy Lake Ware, was exposed primarily within the plow zone (0-20 cm), with some associated artifacts recovered from 20 cm to 40 cm below surface (Michloic 1981b). Auger tests performed after exposure of the Woodland component suggested the presence of an older manifestation underlying the Woodland material. Consequent excavation revealed a defined feature (a small oval firestain) and associated burned bone and lithic debris approximately 90 cm below ground surface. A carbon-14 date from the buried feature is 4,330 + 115 before present (B.P.) (Michlovic 1981b).

Michlovic returned to site 21NR9 in 1981 for a more thorough subsurface examination (Michlovic 1981e). Material recovered through excavation in 1981 included five projectile points and a quantity of bison bone. One of the recovered point bases is Oxbow-like. The presence of this point and the +4,000 B.P. date certainly would suggest an Archaic Period manifestation (Michlovic 1981e).

In personal communication between Michlovic and a HASI staff member, Michlovic stated:

Geologists from NDSU have looked at the site and suggested that there is no reason to doubt that similar sedimentary situations exist all along the Red, therefore, we should expect buried components along the Red River levees. Sites may be under 5-6 feet of silt and clay in this area (Michlovic 1981e).

Since sites 21NR9 and 21NR29 are separated by approximately only 7 mi. and both are contained in the same geologic and physiologic

regions, we feel that any future subsurface investigation of site 21NR29 should include deep-level-testing, extending from 5 ft. to 6 ft. below ground surface.

In August 1981, Michlovic conducted an archaeological reconnaissance of proposed dam construction areas along Moccasin Creek (south of Fossom, Minnesota, and approximately 40 mi. southeast of Halstad) for a Fargo-based engineering firm. Approximately 25 ac. were surveyed, and 36 shovel tests were performed. No cultural material was discovered during survey or from the shovel tests (Michlovic 1981a).

3. ENVIRONMENTAL SETTING

3.1 GEOLOGY

The modern valley of the Red River is contained in the lake bed of former Glacial Lake Agassiz. This glacial lake first was formed approximately 12,800 years ago by meltwater of late Wisconsin glacial ice as the continental ice sheet withdrew to the north, but continued to block the normal northern drainage. Elson (1962) believes that Lake Agassiz existed in two phases with a probable interval between, during which time the lake may have drained completely. Lake Agassiz I was formed by the retreat of the Port Huron-Mankato ice lobes. The maximum limit of this lake phase is marked by the Herman Beach (circa 12,000 years B.P.), and had its early drainage south through Glacial River Warren, the present Minnesota River. Following Lake Agassiz I, during the Two Creek Interval, the lake diminished greatly in size and may have drained completely. Following this interval, the advance of the Valders ice blocked northern and eastern drainage channels, forming Lake Agassiz II with a maximum extent marked by the Campbell Beach. smaller beachlines are evidence of the gradual shrinking of Lake Agassiz II which, following glacial retreats, drained to the north and east. By about 8,800 B.P., the former glacial lake had left Minnesota, and in another 1,500 years, Lake Agassiz disappeared (Waters 1977).

While Lake Agassiz existed, melting glaciers poured collected debris, sand, silt and clay into the lake. These materials settled to the bottom, and the flat lake bed formed hundreds of feet thick. Today, the prairie drains gradually to the north at about 1 ft. per mile (Waters 1977). The glacial lake bed and associated strandlines constitute the Red River Lowland physiographic division (Schwartz and Thiel 1979).

Norman County contains Herman and Campbell beaches; however, these features are located approximately 30 mi. (Herman Beach) and 15 mi. (Campbell Beach) east of the Halstad study area (Winchell 1911). While Lake Agassiz existed, megafauna--including mammoths--lived along the shorelines. Fluted Folsom points have been found at surface sites on the edge of Lake Agassiz in North Dakota, particularly in the Sheyenne Delta area (Johnson 1962). These Folsom points may represent human occupation along the western edge of Glacial Lake Agassiz. No fluted points have been found on the Minnesota side of the lake basin (Michlovic 1979). A more recent Paleo-Indian point of the Agate Basin type was found in Clay County, south of Glyndon. The point was found well within the glacial lake boundaries, which lead Michlovic to believe the tool was manufactured after the lake had receded in this portion of Minnesota (Michlovic 1979).

Many Old Copper (Archaic) burial sites and Arvilla mound sites have been found in and on major beach strands in western Minnesota. Johnson (1962) feels that these Old Copper manifestations were not associated with the ancient lake itself, but were "purely fortuitous." Arvilla burial mounds were built thousands of years after Lake Agassiz was finally drained.

Evidence of human occupation in the middle Red River valley is presented in more detail in the Regional Human Occupation (Chapter 4., page 23).

3.2 SOILS

The Halstad survey area is located within the level glacial lake plain. The specific soil type found in the Halstad area is classified as Fargo (Arneman 1963, map). Fargo soil is described as:

...poorly drained soil with a black surface has formed from calcareous lacustrine clay. This soil is neutral to calcareous at the surface. Surface drainage is a problem, especially in spring. Common crops in this cash grain farming region are small grain, potatoes, and sugar beets (Arneman 1963).

3.3 CLIMATE

Borchert and Gustafson (1980) have classified the climate of the Halstad area as Climatic Zone 4, a zone limited to small grains and forage crops. Mean daily maximum in July ranges from 82°F to 86°F. The last spring frost generally occurs between 12 May and 31 May, while first fall frost occurs between 16 and 25 September. Growing degree days (i.e., cumulative total of degrees during the growing season from days in which the average daily temperatures exceed 50°F) ranges from 1600 to 2200. Annual precipitation is from 22 in. to 24 in., while annual snowfall is generally less than 40 in. (Borchert and Gustafson 1980).

3.4 FAUNA

From 1801 until 1808, Alexander Henry, Jr.--fur trader for the North West Fur Company--headquartered his lower Red River operations at present-day Pembina, North Dakota. This site was located at the confluence of the Red and Pembina rivers, a little more than 100 mi. north and slightly west of Halstad. Henry's journals contain numerous entries that relate to the animal species of the region. Elliot Coues (1897) edited Henry's journal, inserting many timely footnotes. Russel Reid and Clell Gannon (1928) synthesized the faunal data contained in Henry's journal, and consequently presented a detailed account of types and quantities of wildlife that existed in these northeastern reaches of the prairie during the initial decade of the 19th century.

Among the animals recorded by Henry (Coues 1897) and identified by Reid and Gannon (1928) are: bison (Bison bison), elk (Cervus canadensis), moose (Alces alces), antelope (Antilocapra americana, very rare), muskrat (Ondatra zibethica), beaver (Castor canadensis), jackrabbit (Lepus townsendii), lynx (Lynx canadensis, most common west and north of Red River), wol: (Canis lupus), coyote (Canis latrans), red fox (Vulpus vulpus), swift fox (Vulpus velvox), ermine (Mustela erminea), mink (Mustela vision), marten (Martes americana), fischer (Martes

pennanti), wolverines (Gule luscus, very rare), otter (Lutra canadensis), badger (Taxidea taxus, rare), skunk (Mephitis mephitis),
racoon (Procyon lotor), black bear (Ursus americana), grizzly bear
(Ursus horribilis, very rare--more common to the west), and whitetailed deer (Odocoileus virginianus).

Henry has many entries in his journal expounding on the huge numbers of bison around his Pembina post and areas to the west (Coues 1897). Bison herds must have roamed the area in and around Halstad in prehistoric and early historic times, at least on a seasonal basis. This is verified by the bison migration studies conducted by Moodie and Michlovic (1981c) suggests that many of the occupation Ray (1976). sites along the Red River in Norman County may be bison procurement areas and possibly temporary hunting camps. Large bovid (cow or bison) bones have been observed on the surface of site 21NR29, located in the The prairie-woodland border has been well-docu-Halstad study area. mented as prime habitat for white-tailed deer (Hickerson 1970). Beaver were easily the most economically important fur-bearing animals to fur traders. Disease and over-trapping had diminished the beaver population so drastically in the Red River/Pembina River area by 1808 that Henry was forced to abandon his operations there. By 1818, the middle Red River country was no longer a desirable place for the fur trade (Schweigert 1977).

Henry was not a naturalist, and his interest in natural history was only from the standpoint of a fur trader. He usually made reference to birds in general terms, and made no specific mention of birds in his observations of the fauna of the area.

The following list was extracted from Reid and Gannon's (1928) article, and consists simply of a number of Henry's bird sitings. These sitings were made between 1800 and 1808 in present-day northeastern North Dakota.

Larus sp. - Gulls

Pelecanus sp. - Pelicans

(Many unspecific references) - Ducks

Mergus sp. - Shell drake

Branta canadensis - Canadian geese (and possibly others--Reid and Gannon 1928)

Olor sp. - Swans

Ardea herodias - Great blue heron (according to Henry's claims)

Grus americana - White or Whooping crane (Reid and Gannon 1928)

Grus canadensis - Sandhill crane (Reid and Gannon 1928)

Bonasa umbellus - Ruffed grouse (Reid and Gannon--1928--believe a reference to pheasant is a reference to ruffed grouse) Eclopistes migratorious - Passenger pigeons

3.5 FLORA

In about 1929, Francis J. Marschner, then a Research Assistant in the Office of Agricultural Economics, U.S. Department of Agriculture, Washington, D.C., began work on a map of the original vegetation of Minnesota (Marschner 1974). The information Marschner used in delineating vegetation types for his map was based on survey notes, descriptions, and maps from the original land surveys of Minnesota, which were made by the U.S. General Land Office between 1850 and 1905. Since these surveys usually were conducted just prior to settlement, the map shows vegetation before it was altered directly by cultivation, commercial logging or land clearing. This map was published in 1974 by the U.S. Department of Agriculture (Marschner 1974).

Marschner's (1974) map indicates that our study area was composed of three vegetation units: river bottom forests; prairie; and wet prairie, marshes and sloughs. Some of the important species of each unit, as described by Heinselman (1974), are listed below.

River Bottom Forest - Along the Red River of the North, this unit would consist primarily of elm (Ulmus sp.), ash (Fraxinus sp.), cottonwood (Populus deltoides), box elder (Acer negundo), oaks (Quercus sp.), basswood (Tilia americana), soft maple (Acer saccharinum), willows (Salix sp.), aspen (Populus tremuloides), and hackberry (Celtis occidentalis).

Prairie - The prairie in and around the present study area was of the so-called tall grass prairie type. Some of the important species were big bluestem (Andropogon furcatus), little bluestem (Andropogon scoparius), Indian grass (Sorgastrum nutans), prairie Junegrass (Koeleria cristata), and other grasses in many forms such as prairie clover (Petalostemon purpureum), various asters (Aster sp.), various goldenrods (Solipago sp.), and pasque flower (Anemone patens). Also included are various shrubs, especially roses (Rosa sp.) and wolfberry (Symphoricarpos occidentalis).

Wet Prairies, Marshes and Sloughs - This type encompasses a wide range of wetlands, and probably consisted of seasonally inundated grasslands in a portion of our study area. Prominent species were: bluejoint grass (Calamagrostis canadensis), big bluestem (Andropogon furcatus), many sedges (Carex sp.), common reed (Phragmites communis), wild rice (Zizania sp.), and iris (Iris sp.).

The prairie grasslands are known to have supported large herds of migrating bison. To this day, the river bottom forest supplies cover for other large mammals, such as white-tailed deer. These forests also may have supplied human occupants with fuel for fire, and shelter against inclement weather.

Frances Densmore (1928) conducted an extensive survey on the Chippewa Indian use of plants. These people were known to exploit both woodland and plains environments, at least in historic times (Warren 1957, Coues 1897). Many of the informants interviewed by Densmore lived on or near the White Earth Reservation, approximately 50 mi. east of Halstad. When the list of plants found in and around the Halstad area is compared with Densmore's (1928) list of Chippewaused vegetation, it can be seen that many plants from the former list

may have served a human function (Table 1). Table 1 is not meant to imply that the Chippewa lived in the study area, nor does the list definitely represent all the plants that may have been used in the area. It is presented here merely to illustrate the potential for plant use in and around the Halstad area.

TABLE 1

VEGETATION IN AND AROUND THE STUDY AREA NEAR HALSTAD, MINNESOTA POSSIBLY USED BY AMERICAN INDIANS

Scientific Name	Common Name	Use					
Andropogon furcatus	Big bluestem	Medicine (indiges- tion)					
Petalostemon purpureum	Prairie clover	Medicine (heart trouble)					
Aster sp.	Various asters	Food, medicine (ear), charms					
Solidagos sp.	Various goldenrods	Medicine (fever, ulcers, boils)					
Anemone patens*	Pasque flower	Medicine (headache)					
Rosa sp.	Various roses	Medicine (eye), food					
Symphoricarpos occidentalis	Wolfberry	Medicine (physics)					
Phragmites communis	Common reed	Utility					
Zizania sp.	Wild rice	Food					
Iris sp.	Various irises	Medicine (poultice)					
Ulmus sp.	Various elms	Medicine (sore throat), utility					
Fraxinus sp.	Various ashes	Medicine (tonic), utility					
Quercus sp.	Various oaks	Medicine (heart wounds), utility					
Tilia americana	Basswood	Utility					
Acer saccharinum	Soft maple	Food					
Salix sp.	Various willows	Medicine (indiges- tion), utility					
Populus tremuloides	Aspen	Medicine (diseases of women), food					
*Densmore gives scientific name as <u>Pulsatilla</u> <u>hirsutissima</u> .							
Source: Adapted from Densmore	(1928).						

4. REGIONAL HUMAN OCCUPATION

4.1 PREHISTORIC OVERVIEW

The Halstad, Minnesota, survey area is located along the east side of the Red River. It lies within the extreme eastern portion of the spatial archaeological subdivision of the Great Plains known as the Northeastern Periphery (Wedel 1961). Since the cultures of the Plains region of extreme western Minnesota display strong Great Lakes Woodland affiliations, we will modify our nomenclature to reflect those influences. This is not to suggest a non-relationship between the peoples of the Red River Valley and cultures farther west on the Northern Plains. It does reflect, however, how little is known presently about those relationships.

For purposes of this report, the prehistoric cultures of western Minnesota have been divided into major categories referred to here as culture periods. These periods are: Paleo-Indian (10,000 to 6,000 B.C.); Archaic (at least 3,000 B.C. to circa A.D. 1); and Woodland (circa 200 B.C. to historic times). Apparent Plains-Midwest relationships also will be discussed. It should be noted that the above dates are tentative and reflect what presently is known from the archaeological record about the middle Red River Valley and surrounding area. The periods are presented here to supply the reader with a general chronologic perspective of the area's prehistory.

4.1.1 Paleo-Indian Period

Paleo-Indian (10,000 B.C. to 6,000 B.C.) subsistence was based primarily on the exploitation of herds of big game animals popularly referred to as megafauna. Much of this megafauna consisted of presently extinct forms of bison, along with other mammoths and animals now extinct in North America (e.g., various species of horses and the camel). Smaller game and plants probably were exploited as well. While settlement was in small, temporary campsites, hunting of the megafauna was a communal effort, involving large numbers of people. Most Paleo-Indian sites recorded to date have been large campsites; however, a few small Paleo-Indian campsites also have been discovered (Frison 1978).

Artifacts associated with Paleo-Indian sites typically are well-made, consisting of distinctive lanceolate projectile points, knives, choppers, and scrapers. Point types include the fluted Clovis (Llano Complex), Folsom and possibly Midland (Folsom Complex), and a variety of later point types such as the Alberta, Plainview, Scotts Bluff, Eden Valley and Hell Gap (Plano Complex).

Evidence of a Paleo-Indian manifestation closest to the 1981 HASI survey area appears to be from south of Glyndon, in Clay County, Minnesota (roughly 30 mi. to 40 mi. south and slightly east of Halstad), where Michlovic (1979) found an Agate Basin point in a plowed field. Michlovic has given the point a tentative date of 8,000 to 9,000 B.P. He notes that the find was well within the Lake Agassiz boundaries, and feels that the lake probably had receded in this portion of Clay County

by 9,100 B.P. (Michlovic 1979). A Paleo-Indian point was found in association with a burial from Brown Valley in the Lake Traverse area of extreme southwestern Minnesota. The site has been dated tentatively at 8,000 B.P. (Johnson 1962). Older, Folsom occupations of the west bank of Lake Agassiz are suggested by surface finds, particularly in the Sheyenne River Delta region of eastern North Dakota (Johnson 1962). A private collector from Sheyenne, North Dakota (just south of Devils Lake) claims to have found a flutid point on the ground surface near Sheyenne (Schneider 1981). Plano Complex points are known from many surface finds in southern Manitoba (Pettipas 1970).

4.1.2 Archaic Period

As Michlovic (1979) has noted, "there is a great deal of confusion regarding the nomenclature of prehistoric, pre-Woodland cultures in this area, with few authors agreeing on the kinds of artifacts or the chronological placement that characterizes various Archaic complexes." It is beyond the scope of this study to attempt to unravel this confusion, and therefore, we provide only a report of what has been found in the general vicinity of Halstad.

Probably the earliest evidence of an Archaic manifestation in western Minnesota is represented by Oxbow-type projectile points, sometimes referred to as Parkdale Eared (MacNeish 1958). As previously mentioned, Michlovic excavated a deeply buried, undisturbed site (site 21NR9) in Norman County which dates to the Archaic Period. One projectile point from this site is morphologically similar to Oxbow points (Michlovic 1981e). Michlovic (1979) also reported the observation of many Oxbow-Parkdale Eared points in private collections from Clay County, Minnesota (located immediately south of Norman County). Shay (1971) has found points of this general type at the Itasca Bison Kill site (approximately 80 mi. east of Halstad), which date to at least 7,000 B.P. Syms (1970), on the other hand, states that the Oxbow-Parkdale Eared materials represent relatively late Archaic developments, and Michlovic (1979) feels that this material dates to at least 5,000 to 3,000 B.P. Michlovic, in a preliminary report (1979), notes the morphological similarities between the Oxbow-Parkdale Eared points and artifacts of the Early Archaic Hardaway-Dalton Complex from the central midwest and eastern United States. Michlovic suggests that Oxbow-Parkdale Eared material may date earlier along the Red River Valley than those manifestations found elsewhere on the Northern Plains.

A rather common and possibly better-understood Archaic manifestation present in the Red River Valley is represented by the Old Copper Complex. Johnson (1964) reports four isolated finds and a possible campsite consisting of Old Copper materials from the Crookston area (within 50 mi. north and slightly east of Halstad). Michlovic (1979) found three Old Copper artifacts within the Agassiz lakebed in Clay County. Reported evidence of Old Copper findings in Norman County was not noted during conduct of the present study.

Extensive Old Copper manifestations are present in Michigan and Wisconsin (Jennings 1974). Through radiocarbon dates, Quimby (1962)

has set the temporal span of Old Copper between 5,000 B.C. and 1,080 B.C. At least one source (Anfinson 1979) has expanded the period from approximately 6,000 B.C. to 300 B.C.

Johnson's (1964) Red River Valley investigations generally have dispelled the previously-held theory that some Old Copper producers lived along the receding banks of Lake Agassiz. Johnson (1962) and Steinbring (1970) theorize a northerly movement of Old Copper peoples along the Red River Valley into southeastern Manitoba. This could represent one of the initial moves of Woodland peoples onto the prairie periphery. Johnson notes association of a Woodland sheet copper breast ornament with a large copper blade morphologically similar to Old Copper projectile points from an Arvilla Complex burial mound in Grand Forks County, North Dakota. From this association, Johnson suggests that the Early Arvilla Burial Complex may represent a situation in which the copper technology was shifting from production of utilitarian tools to production of personal ornamentation.

Michlovic (1979) also found a number of Pelican Lake points during his survey in Clay County. The Pelican Lake Phase apparently began replacing the McKean-Duncan-Hanna Phase in approximately 1,000 B.C. The large, corner-notched Pelican Lake points (rarely unnotched) have been found in abundant numbers on the Northern Plains, particularly in the Canadian provinces, and to a lesser degree along the Upper Missouri Trench. Dates for this phase in southeastern Alberta extend slightly into the Christian era (Reeves 1970). Joyes (1970) estimates the Pelican Lake occupation of the Avery site in southwestern Manitoba as occurring between 500 B.C. and A.D. 1.

The people who represent this phase appear to have been specialized big game hunters, who concentrated on bison. No ceramics have been associated with the Pelican Lake Phase. Their campsites were not extensive, rather, they suggest occupations by small groups. There is evidence associating some Pelican Lake Phase peoples with habitation in tipi or tipi-like structures (Reeves 1970). Joyes (1970) theorizes that these people existed in nomadic bands which probably coalesced into large groups for seasonal bison hunts. These people definitely had mastered the techniques of taking bison in pounds and jumps (Reeves 1970). There presently is little recorded evidence of Pelican Lake people in the Red River Valley.

4.1.3 Woodland Period

Pottery manufacture is a definitive criteria for the Woodland culture. Early Woodland manifestations are found primarily in the forested lake regions of eastern and central Minnesota and date at least as early as 500 B.C.

Perhaps the earliest Middle Woodland manifestations located anywhere near the Halstad study area are represented by Laurel Complex materials at the Lake Bronson site, 21KT1, (Anfinson et al. 1978), and the Dead River site, 21OT51 (Michlovic 1979). The Lake Bronson site is located on the Prairie/Aspen Parkland transition zone of the Red

River Valley in Kittson County, in extreme northwestern Minnesota and approximately 90 mi. north of Halstad. The Dead River site is situated in Otter Tail County, approximately 75 mi. southeast of Halstad, in the west-central lakes region of Minnesota between the pine-hardwood forest (to the east) and the prairie (to the west).

In general, the Laurel Complex has been dated between 100 B.C. and A.D. 1000. A date of 1745 + 85 RCY:A.D. 205 from the Laurel component at the Lake Bronson site is the first radiocarbon date from a Laurel occupation in the prairie (Anfinson et al. 1978).

The Laurel people were sometimes mound builders and subsisted on a hunting and gathering economy which involved extensive exploitation of fish during warmer periods of the year (Anfinson 1979). At the Lake Bronson site, bison procurement is associated directly with the Laurel occupation (Anfinson et al. 1978). Burial mounds associated with the complex generally contain secondary bundle burials.

The Arvilla Burial Complex is possibly the best known, most studied, and least understood manifestation in the Lake Agassiz plains (Michlovic 1979). The Arvilla Complex is based solely on the consistent, reoccurring patterns of a number of burial mound sites in a geographic area extending from the St. Croix River Valley in eastcentral Minnesota, west to the Red River Valley, and north along that river to the Pembina Plain and the Winnipeg area (Johnson 1973). The greatest concentration of Arvilla Complex burial mounds is in the Red River Valley. As previously mentioned, the only sites in Norman County excavated up until 1972 were two Arvilla Complex burial mound sites, 21NR1 and 21NR2 (Streiff 1972). Both sites are located at least 20 mi. from Halstad. We are not aware of any other recorded Arvilla sites in Norman County; however, two additional Arvilla mound sites, the Warner site (21PL5) and the Peter Lee site (21PL13), have been excavated along the Sand Hill River in Polk County, located north of and adjacent to Norman County (Johnson 1973).

The Arvilla Complex developed rapidly from about 500 A.D. to 600 A.D., disappeared in the southern portion of the general area by 900 A.D., and may have continued for centuries in the Red River basin in Manitoba (Johnson 1973). Syms (1979) believes that the Arvilla Complex persisted until approximately A.D. 1400.

Johnson (1973) defines Arvilla Complex burials as linear and circular burial mounds underlaid by deep pits with complete and disarticulated primary burials, secondary burials, and a variety of associated grave goods (e.g., numerous ornaments of shell, bone, antler and teeth; utilitarian objects of bone and antler--rarely chipped stone tools; and sometimes pottery elbow pipes--pottery vessels are uncommon). Johnson (1973) and others have recognized the fact that Arvilla mounds often are associated with St. Croix and Blackduck ceramic types. This would suggest that Arvilla people were participating in other cultural systems (Michlovic 1979). Ossenberg (1974) theorizes that participants in the construction of Arvilla mounds are descendants of the Cheyenne and Blackfoot Indian groups.

Middle Woodland ceramics characteristically are thick-walled, concoidal to sub-concoidal vessels with decorations including dentate stamping, punctates, bosses, and trailed lines. Surface treatments include cord-marking, fabric/net-impressing, and smoothing (Anfinson 1979).

The Late Woodland Period generally was well-developed by A.D. 900 in most of Minnesota. Economic, technologic, and demographic changes, as well as ceramic changes, are evidenced in the transition from Middle to Late Woodland. Economic changes include a greater dependence on wild rice by peoples in northern and central Minnesota. The number and size of sites appear to increase in these areas during the Late Woodland. People from all areas in Minnesota appear to have abandoned the spear and atlatl in favor of the bow and arrow during the Middle-Late Woodland transitional period (Anfinson 1979).

Ceramic vessels became more globular and generally had thinner walls during the transition. Cord-wrapped stick and twisted-cord impressions used in exterior decoration increased, while dentate stamping remained a popular decorative technique. The number of smoothed-bodied and fabric/net-impressed wares gave way to cord-marked vessels (Anfinson 1979).

While a number of ceramic types have been found in Minnesota's Red River Valley, no unique phases currently are recognized for these areas. St. Croix Ware has been found at surface sites in Clay County (Michlovic 1979). During Michlovic's 1980 to 1981 survey along the Red River, Blackduck and Katio wares were observed in private collections from Norman County (Michlovic 1981b). During the same survey, 1,200 body sherds and 80 rims and decorated pieces were collected. The vast majority of this pottery represents Sandy Lake Ware. Some sherds collected in the survey were similar to Mississippian Tradition, Oneota Ware.

Since Sandy Lake Ware is the only known ceramic type present in the present study area and appears to be the dominant ware in this portion of the Red River Valley, it is discussed in some detail. Sandy Lake Ware displays diverse tempering elements and surface treatments. Temper may consist of shell or grit, while surfaces may be vertically cord-marked, simple-stamped, check-stamped, plain, or smoothed-over cord-marked (Birk in Anfinson 1979). All Sandy Lake sherds found in the Halstad area are cord-marked, and most are shell-tempered.

Sandy Lake ceramics have been defined tentatively as an expression of the Wanikan Culture, a cultural sub-unit of the Late Woodland Tradition dated circa A.D. 1000 to A.D. 1750. It generally is accepted that Wanikan Culture peoples were Siouan-speakers. Whether they represent proto-Assiniboine or proto-historic Eastern Dakota remains in question (Birk 1977; Arthurs 1978; Lugenbeal 1978).

The distribution of Sandy Lake ceramics in both woodland and prairie zones represents the use of multiple environments. Michlovic

(1981c) feels that these people based their subsistence on wild rice in the lake-forest regions, but also exploited the Red River Valley and areas to the west which offered deer and bison.

This discussion has been limited thus far to cultural manifestations in the middle Red River Valley that display strong eastern influences. Michlovic's 1980-1981 survey of this area disclosed the presence of Plains as well as Woodland-type projectile points. with the fact that Knife River flint and Tongue River silicified sediment (both from sources in the central and western Dakota region) also are present, certainly suggests a tie between the middle Red River Valley area and Plains areas farther west and north (Michlovic 1981c). Oneota and Oneota-like pottery discovered recently in the middle Red River Valley (Michlovic 1981c) suggests a southern influence as well. The nature and extent of these relationships, and the role that the middle Red River Valley played in the overall scheme through time presently are understood poorly. We can state with some confidence that the valley was used for bison hunting from at least Middle Archaic through Late Woodland times (Michlovic 1981c). The valley could supply prehistoric occupants not only with a variety of food resources, but also with wood for fuel and shelter, and with water as a mode of transportation.

In conclusion, the prehistory of the Red River Valley should be viewed "not only as the western outpost of Woodland culture, but as a node in the reticulum of procurement stations in a greater Plains-Midwest cultural-geographic system" (Michlovic 1981c).

4.2 HISTORIC INDIAN GROUPS IN THE RED RIVER VALLEY AREA

The Red River Valley was used by many Indian groups or tribes during prehistoric and historic times. Michlovic (1981c) suggests that most historians, ethnographers, and archaeologists view the movements and subsistence activities of these various groups in a totally unilinear manner (i.e., movement onto the Plains of one Indian group after another after they had been pressured out of the woodlands to the east). Once the Woodland peoples reached the Red River Valley, they reportedly had to adapt to a totally new lifestyle. Michlovic (1981c) suggests using Syms (1977) Co-Influence Sphere model to interpret the prehistoric and historic use patterns of the Northeastern Periphery, including the Red River Valley. Under this model, the Northeastern Periphery may be viewed as a huge procurement/catchment area, occupied by co-existing groups who exploited both woodland and plains environments during various seasons until white contact. Use of this model is inherent in the following discussions.

Although there is some written historic and ethnologic evidence of use of the Red River Valley by historically-known Indian tribes, specific areas generally are not mentioned. The following discussions present a number of ethnic groups who may have exploited the land in and around the Halstad study area during the protohistoric and historic periods.

All seven tribes of Dakota traditionally are said to have descended from one tribe (the Mdewakanton) who lived near the Mille Lacs area of central Minnesota (approximately 160 mi. east and south of Halstad). Each year the seven tribes gathered in council (Woolworth, A. 1970; Keating 1959). By the end of the 17th century, a segment of the Mdewakanton were living considerably south of Mille Lacs, at least for part of the year. This is evidenced by the fact that French traders built Fort Huillier in October 1696 at present-day St. Paul (Kellogg 1971); it is speculated that Fort Huillier was built to attract trade with the Sisseton tribe (Schweigert 1977). That some Dakota people were exploiting the prairie environment by at least 1700 is illustrated by observations of Dakota camps on the Minnesota River headwaters in that year (Mott-Wedel 1974). By about 1785, the Wahpeton and Sisseton groups of Dakota were serving as middle-men in trade between the French at Fort Huillier and the Teton Dakota, who were well-established on the Plains by this time.

Alexander Henry, fur trader, described a number of old Sioux war camps and "old elm-bark cabins," which supposedly were erected by the Sioux during the summer of 1800 (Coues 1897). These camps and cabins were located on the present site of East Grand Forks, Minnesota, approximately 40 mi. north of Halstad. In 1804, William Clark reported that the Sisseton and Wahpeton were trading with Mr. Cammaron on the head of the Minnesota River, and meeting the Teton and Yanktonai at the annual trade fair somewhere on the James River (Thwaites 1904-1905). When the Long Expedition visited the Red River area in 1823, the Yanktonai were said to be roaming an area from the Red River as far north as the mouth of the Pembina River, and westward to the Missouri (Keating 1959). Groups of the Santee (Mdewakanton and Wahpekute) were said to reside east of the Yanktonai, while the Wahpeton and Sisseton lived near Lake Traverse and to the east (Keating 1959). The latter two groups probably ventured to the west, at least on trading expeditions. The possibility that the Yanktonai still traveled into the woodland areas in 1823 is illustrated by the fact that a combined force of Sisseton and Yanktonai attacked Fort Snelling in 1820 (located in present-day St. Paul).

Five settlers were murdered by a small Santee hunting party at Acton, Meeker County, southern Minnesota, on 17 August 1862 (Carley 1976). This was the initial act in an event known variously as: the Sioux Uprising, the Sioux Massacre, and the Sioux War, of 1862. Between the time of the Acton incident and the final surrender of the Sioux at Camp Release (Lac Qui Parle County, Minnesota) on 26 September 1862, 450 to 800 white settlers and soldiers were killed (Carley 1976). The battles and killings basically were confined to the Minnesota River region of southern Minnesota. Conflicts nearest the present study area involved two attacks on Fort Abercrombie (located on the west side of the Red River, approximately 55 mi. south of Halstad), one on 3 September and the other on 6 September 1862.

Reasons for the 1862 uprising are numerous and complex; tensions had been building many years prior to the armed conflict. The main reason for the war probably is related to dissatisfaction which

grew from land sales by the Santee to the U.S. Government in the 1851 Treaty of Mendota; the Sioux ceded a total of nearly 24,000,000 ac. of rich farmland to the U.S. Government in the 1850s (Carley 1976). The 1851 treaties of Mendota and Traverse des Sioux left the Sioux with two reservations on the Minnesota River in what was to become southern Minnesota. The Upper Sioux (Wahpeton and Sisseton) were generally satisfied with their reservation, because they were able to retain their old villages. However, the Lower Sioux (Santee) were dissatisfied with their reservation, because they had to abandon their villages and hunting territories in the woodland areas of Minnesota, and resettle in the prairie environment of the upper Minnesota River (Carley).

Violation of two treaties signed in 1858 furthered tensions. Through these two treaties, the Upper and Lower Sioux sold additional land to the U.S. Government, but the Indians never received promised retribution for the land (Bouler 1944).

Another factor leading to the Sioux War of 1862 was congressional passing of the Homestead Act earlier that year. The lure of free land brought thousands of settlers into Minnesota, and "the 1862 revolt was simply the last stand of the Sioux against the white men for possession of their native land" (Bouler 1944).

Finally, the nation's involvement in the Civil War provided at least an indirect cause for the 1862 revolt. Many whites had traveled to southern battlegrounds when the first rumors of trouble in Minnesota reached military authorities (Bouler 1944). All available munitions were being poured into the Civil War effort, and problems in Minnesota were left to be settled later (Bouler 1944).

Even after the Indian surrender at Camp Release on 26 September 1862 and the execution of 38 Sioux leaders at Mankato on 26 December 1862, most Minnesotans still were enraged over the Indian War. "Incited by a resentful press white Minnesotans were not disposed to distinguish between hostile and friendly Indians" (Carley 1976). Under these conditions, it logically is inferred that most Sioux residing in or near the present study area must have felt it best to leave north to Canada or to locations farther west on the open prairies.

Sandy Lake Ware has been found abundantly in and around our study area, as well as in northwestern Wisconsin, across north-central Minnesota, and possibly in the Sheyenne and James river valleys in North Dakota (Vehik 1979; Wheeler 1963 in Michlovic 1981c). It is felt by some authorities to represent the ceramic tradition of the prehistoric ancestors of the Dakota (Birk 1977, Syms 1979). If this theory is accepted, it is possible to infer that the Dakota and their descendants may have exploited the woodland, prairie, and plains environments for centuries. However, more archaeological research is needed to solidify this inference.

The Chippewa and Dakota were engaged intermittently in warfare from at least 1658 until about 1860 (Kellogg 1917). During the Battle of Kathio in approximately 1750, the Chippewa (who possessed firearms)

may have gained dominance in the Mille Lacs area (Meyer 1967). Fur posts probably were established in northern Minnesota during the early 1780s, which attracted Chippewa trappers. By 1798, the area east of Red Lake was severely depleated of fur-bearing animals and both traders and Chippewa moved east (Schweigert 1977).

During 1806 and 1807, a voyageur named Langlois, employed by Alexander Henry of the Northwest Fur Company (located at Pembina), is said to have established a post(s) on the Sand Hill River (Coues 1897) (located in southern Polk County, Minnesota, and approximately 15 mi. north of Halstad). Langlois was accompanied by several Chippewa trappers. At this time, the Chippewa that congregated around Henry's post at present-day Pembina were said to go on seasonal bison hunts to the Turtle Mountains (to the west) and as far south as the Wild Rice River (southeastern North Dakota). By 1808, Henry was forced to abandon his post at Pembina because hunting and disease almost had eliminated beaver completely from the area (Coues 1897). By 1818, the middle Red River country was no longer a desirable place for fur trade, and Chippewa who had hunted for traders had returned to their villages (predominantly in the Red Lake/Leach Lake areas of northern Minnesota), or were residing in small settlements near European or Metis settlements (Hickerson 1956 in Schweigert 1977). Warren (1957) characterizes historic Chippewa as a people exploiting both woodland and prairie environments.

The Cheyenne Indians were known to reside along the Minnesota River in southern Minnesota and in the Lake Traverse area on the present Minnesota-South Dakota border in historic times (Wood 1971). Grinnell (1971) suggests that the Cheyenne may have ventured farther down the Red River Valley, but does not specify to what area. Ossenberg (1974) notes a pronounced similarity between remains from Arvilla Complex burials and historic Cheyenne crania, and theorizes that Arvilla mound builders may represent ancestral Cheyenne.

Probable Cheyenne villages were located on the Sheyenne River (Wood 1972) and at Devils Lake (Grinnell 1972, Keating 1959), both farther out on the Northeastern Periphery. Cheyenne migration to the Missouri River region and the western high plains was not undertaken by the group in total, but happened in gradual waves (Grinnell 1972). This pattern also may have characterized the Cheyenne movement out of present-day Minnesota.

Other tribes which may have occupied the middle Red River Valley in historic times are the Hidatsa (Bowers 1965), and the oftentimes allied Cree and Assiniboine (Jablow 1950).

4.3 EURO-AMERICAN EMERGENCE INTO THE AREA

The early history of the portion of the Red River Valley in and around the Halstad study area is not known well. It was mentioned previously in this report that a North West Fur Company voyageur named Langlois, accompanied by several Chippewa trappers, established a temporary post(s) along the Sand Hill River in 1806 and 1807 (Coues

1897). Disease and over-trapping of beaver caused much of the middle Red River Valley to be unsuitable for fur trade by 1818 (Schweigert 1977).

In 1823, Major Steven Long led an expedition to "fix" the international boundary between the United States and Canada. The course of Long's expedition led his party down the St. Peter River (now the Minnesota River) and up the Red River to Pembina (Keating 1959); therefore, Long likely traveled very near the Halstad area.

Red River oxcart trails first were established in about 1820 to connect the Red River settlement at Fort Garry (near present-day Winnipeg) with the merchants at St. Paul (Gilman et al. 1979). In the early 1840s, Joseph Rollette established a trading post at Pembina, North Dakota, at the confluence of the Red and Pembina rivers. The post headquarters were soon moved to St. Joseph at present-day Walhalla (approximately 35 mi. west of Pembina) because of flooding (Woolworth, N. 1975; Lee 1897). The St. Joseph/Pembina posts soon became important cogs in the Fort Garry to St. Paul trade routes (Gilman et al. 1979).

As Gilman et al. (1979) have noted, these oxcart trails tended to vary seasonally according to weather, accessibility, and the personal preferences of the individual cart drivers. Two recognized oxcart trails in Norman County are oriented on a north-south axis, and are located approximately 30 and 35 mi. east of Halstad. Another oxcart trail paralleled the Red River on its west side, along the approximate route of present-day North Dakota Interstate 29; this trail must have come within 5 mi. west of Halstad. In 1872, Moorhead was opened to the North Pacific Railroad (which was being expanded from the east), and general disuse of oxcart trails followed (Gilman et al. 1979).

The Hudsons Bay Company established a fur trading post at the present site of Georgetown, Minnesota, as early as 1859 (Turner and Semling 1918). Georgetown is located along the Red River in northern Clay County, approximately 25 mi. south of Halstad. This post was unoccupied between 1862 and 1864 because of the Sioux Massacre of 1862 (discussed above) (Turner and Semling 1918). The Hudsons Bay Company was running a store at Georgetown in 1870 (Andreas 1884), and a U.S. Post Office was established there in 1871.

Fur traders and trappers associated with this and other posts may have occupied the area in and around Halstad temporarily in the 1850s and 1860s. The first serious attempts to settle this portion of the Red River Valley, however, were not initiated until around 1870. The prospect of free homesteads attracted newly-arrived European immigrants (primarily Scandinavian) from Iowa, Wisconsin, and southern Minnesota to the middle Red River Valley. In 1871, a caravan of five wagons from Fillmore County, Minnesota, entered what was to become known as Halstad Township (Norman County Statehood Centennial Committee 1958). There they discovered an old French trapper and his daughter living in a tar paper shack. Nothing further is known about this pair. The 1871 homesteaders also met two Swedes, Charles Holmberg and

August Ober, who had moved into the area in 1870 and were then cutting wood along the Red River for use by the steamboats. Another group from Fillmore County settled in Halstad Township later in 1871 (Turner and Semling 1918).

Halstad Township was surveyed by the General Land Office in 1871, but was not organized until 1879 (Trygg 1967, Upham 1969). (1967) map of Norman County was drawn by reviewing the original General Land Office survey notes, and it illustrates locations of features such as houses (and their owners), buildings, improvements, homestead claims, trails, roads, etc. No features plotted on this map are located in the present study area; however, a north-south trending road is shown in the W1/2 W1/2 of Section 29, T145N, R48W, approximately 0.25 mi. east of the easternmost flood control measures proposed at Halstad. This entire area is presently under cultivation, and evidence of the roadbed most likely has been plowed under. The road is marked at various places on the map as "Georgetown Road" and "Road from Georgetown to Frog Point and Grand Forks." The extant community of Frog Point, later referred to as Belmont, was located on the west side of the Red River in present-day Traill County, North Dakota, approximately 22 mi. north and slightly west of Halstad (Williams 1961, Andreas 1884).

A Hudsons Bay Company store was established at Frog Point in the spring of 1870 (Andreas 1884). The Hudsons Bay Company agent at Frog Point also was in charge of the Hudsons Bay Company store at Georgetown, and another Hudsons Bay Company store established later in 1870 at Goose Rapids on North Dakota's Goose River, approximately 12 mi. south of Frog Point. In 1871, the road probably was being used as a supply route to connect the three Hudsons Bay Company stores. There is evidence that the early settlers in Halstad Township obtained goods from the Goose Rapids store; it was located approximately 10 mi. north of Halstad, on the opposite bank of the Red River (Turner and Semling 1918, Andreas 1884). Later, the Georgetown Road probably was used to transport goods from Moorhead to Frog Point, which was the head of riverboat trade during times of low water (Robinson 1966).

Early settlers in Halstad Township faced a number of hardships, which forced some to abandon the area. In 1872, millions of grasshoppers hatched, and that year's crops of small grain, potatoes, and garden produce were total failures (Turner and Semling 1918). The following year, the threat of Indian attack sent many early settlers back to more established localities, while other settlers died of consumption.

Despite hard times, many settlers remained, a few more entered the area, and conditions gradually improved. The period between 1875 and 1885 was a time of rapid Euro-American influx. The total population of the part of Polk County that became Norman County (in 1881) was 369 in 1875. In 1880, the population was 3,500, and it had reached 8,335 in 1885. By 1890, the population was 10,611. This contrasts with a 1970 Norman County census tally of 10,007 (Norman County Heritage Commission 1976). This decline is due primarily to the fact that many small farms combined into larger ones; this became desirable when advanced mechanization became available, alleviating the need for extra help (Norman County Heritage Commission 1976).

In Norman County today, small grains such as wheat, oats, and barley are grown, as well as corn, sugar beets, and sunflowers. Milk and beef cattle, hogs, and sheep also are raised. The county also contains many egg and broiler chicken producing farms (Norman County Heritage Commission 1976).

4.3.1 Halstad, Minnesota, Chronology

The following chronology has been produced from data contained primarily in three publications that deal with the history of Norman County, Minnesota: Turner and Semling (1918), Norman County Statehood Centennial Committee (1958), and Norman County Heritage Commission (1976). Since precise dates rarely are provided, years in which given events transpired are presented below in most cases.

- -The Moorhead and Northern Railway (now a division of Burlington Northern) reached Halstad, Minnesota.
 - -23 September. Halstad platted for A.A. White and wife, and C.G. Comstock and wife. The name Halstad was taken from the Township name, which was taken from the Post Office name.
- -The Post Office, first established in 1872 at the rural home of Ole Halstad, was moved into town.
 - -A two-room schoolhouse was built in town.
- 1890 -The Halstad Fire Insurance Company was established.
- -The first bank, known as the "State Bank of Halstad," was established.
 - -A disasterous flood did much damage to property and live-stock.
- -The bank was robbed. One robber was shot by a cashier, captured, and convicted.
 - -Halstad was incorporated as a village.
- -The first newspaper, known as the "Halstad Reporter," began publication. (Halstad's current newspaper is known as the "Valley Journal.")
 - -Two rooms were added to the schoolhouse.
- 1897 -Another devastating flood hit the Red River Valley.
- -A terrible hailstorm destroyed one of the best crops the area had ever grown.
- 1902 -The Post Office safe was blown up, and \$125.00 were taken.

-The village hall was burned to the ground.

- 1904 -The Post Office was robbed a second time--\$35.00 were taken.
 - -A second bank, "Red River State Bank," was established.
- 1905 -An eight-room, brick schoolhouse was built (this building was still in operation in 1981).
- 1933 -Halstad celebrated its Silver Anniversary in the midst of the depression.
- 1939 -Additional classrooms, gymnasium and auditorium were added to the schoolhouse.
- -Additional classrooms, home economics room, kitchen and dining room were added to the schoolhouse.
- 1958 -Halstad celebrated its diamond jubilee.
- -The old gymnasium was replaced, and board rooms were added to the schoolhouse.

It should be noted that a "creamery" structure is shown on a 1910 plat map; possibly located at site 21NR42H (recorded during HASI's 1981 survey), or in the near vicinity. How long before 1910 this creamery existed, however, is not known, nor is it clear at what time it ceased operation. It is known that it still was operated by the Halstad Cooperative Creamery Association in 1918 (Turner and Semling 1918). Since dates for the creamery's creation and termination are unknown, reference to it could not be fitted into the above chronology.

5. THEORETICAL AND METHODOLOGICAL OVERVIEW

The COE presently is engaged in the planning stages of a flood control project at Halstad, Minnesota. It is the primary goal of the contractor, HASI, to provide information necessary for the COE to comply with federally-mandated regulations regarding cultural resources. These regulations have been set forth in: the Historic Preservation Act of 1966 (Public Law--PL--89-665); the National Environmental Policy Act of 1969 (PL 91-190); Executive Order 11593 for the Preservation and Enhancement of the Cultural Environment (Federal Register, 13 May 1971); the Archaeological Conservation Act of 1974 (PL 93-291); the Advisory Council on Historic Preservation "Regulations for the Protection of Historic Properties" (36 CFR 800); Department of the Interior Guidelines concerning cultural resources (36 CFR 60); and COE Regulations (ER1105-2-460) "Identification and Administration of Cultural Resources" (Federal Register, 3 April 1978). Furthermore, HASI has endeavored to produce a scholarly report which may serve as a scientific reference for future professional studies.

In order to meet the above goals, HASI undertook a cultural resource inventory of the proposed project area. This inventory included a literature and records search and review, coupled with a Phase I survey. Literature and records searches and reviews often afford researchers an opportunity to predict the types and distribution of resources that may be encountered during survey. While completing background work, descriptions of well-documented resources often are obtained, as well as data on sites that are known but that will require further study. The literature search also may make possible the development of a broad evaluatory framework within which the significance of particular resources can be determined. The specific methods, sources, and results of the literature and records search and review are presented in the following chapter (Chapter 6., page 39).

In order to determine the number and extent of cultural resources present in the study area, and to determine the relationships of those resources to the project alternatives and feature locations, a Phase I cultural resource survey was conducted. The Phase I survey consisted of an on-the-ground survey of all proposed project feature locations and alternatives. MHS site forms were filled out for each cultural resource located during survey, and are provided in Appendix III. Recommendations for site avoidance and/or descriptions of additional work recommended for each potentially endangered site are located in Chapter 10., Recommendations (page 65). Detailed descriptions of the specific methods employed in the Phase I survey are included in the Field Methods (Chapter 7., page 41).

LITERATURE AND RECORDS SEARCH AND REVIEW

During conduct of the literature and records search and review, advantage was taken of all known available sources that might contain pertinent information on the prehistory and/or history of Halstad, Minnesota, and the surrounding area. The records review and search was conducted by Dr. Norene Roberts, HRI, subcontractor to HASI (Robert's vita is included in Appendix VI, and results of the search and review are provided in Appendix II). Roberts also gathered literature sources pertinent to the environmental setting, prehistory, and history of the Halstad area (see Appendix II). These sources were reviewed and synthesized by HASI staff.

The NRHP, contained in the Standing Structures file of the MHS-The archaeological files of the MSAS, file of SHPO, was reviewed. contract reports, county highway maps, and the Norman County inventory files were checked for recorded prehistoric and historic sites, and for site leads. Files at the Fort Snelling Branch of MHS were searched for abandoned townsites and for fur trading posts. Scott Anfinson, Minnesota County Highway Archaeological Program, was contacted by phone to learn if the Minnesota County Highway or Federal Trunk Highway programs had recorded any sites not on file at MHS-SHPO (Anfinson 1981) (see Appendix II). A letter was forwarded to Mrs. Charles C. Rector, Curator of the Norman County Historical Society, in the fall of 1981 to obtain any relevant information that organization may have had pertaining to the study area. Although this letter was not responded to, Rector indicated that the Norman County Historical Society had no information relevant to the present study in a telephone conversation held on 30 April 1982 (see Appendix IV).

No properties currently listed on the NRHP are included in any of the proposed Halstad flood control lines or areas. No previously recorded prehistoric or historic sites, or site leads, were found to be located in any area of proposed flood control measures during conduct of the records search by HRI (Appendix II). Through conversation with Michael Michlovic (Professor of Anthropology, Moorhead State University), however, it was learned that a prehistoric site (21NR29) had been recorded previously, and was located within an area of proposed flood control measures (Michlovic 1981e). Site form preparation for this site was in progress at MHS at the time of the HRI records search; therefore, there was no record of it in the files at the MSAO--MHS, and HASI located and recorded the site as a new cultural resource during pedestrian survey. Following conversation with Michlovic, HASI contacted MHS, and the matter has been cleared with the MSAO (O'Connell 1981) (see Appendix IV). The site retains its original designation--21NR29.

The List of References (Chapter 12., page 77) contains a complete list of sources used in compiling this report. Below is a brief discussion of those sources that were most particularly relevant to this study. Repositories of these sources include the MHS, SHSND, University of Minnesota Library, University of North Dakota Library, and HASI's company library in Grand Forks, North Dakota. Michlovic's (1981b) preliminary report was forwarded by the COE, and Michlovic (1981c) was forwarded by Michlovic.

Sources most pertinent in completion of the Environmental Setting (Chapter 3., page 15) were Elson (1962) and Waters (1977) for geology; Arneman (1963) for soils; and Borchert and Gustafson (1980) for climate. Alexander Henry (Coues 1897) and Reid and Gannon (1928) contained the most relevant information on fauna possibly present in the area in historic times. Marschner's (1974) discussion of vegetation zones in the area was most helpful in compiling the flora section, while Densmore (1928) supplied information on historic American Indian use of plants that may have occurred in the area.

Numerous sources were used in compiling the Regional Human Occupation (Chapter 4., page 23). A number of these sources generally are used to provide Plains and Woodland overviews. Sources most relevant to the specific Halstad area were Michlovic (1981b,c,e), who has conducted cultural resource work in the immediate area, and provides some syntheses of his findings. Gilman et al. (1979) provide pertinent information on historic trails in the Red River Valley. The history and chronology of Halstad were presented most clearly in an old county history by Turner and Semling (1918), and in more recent county histories by the Norman County Statehood Centennial Committee (1958) and the Norman County Heritage Commission (1976).

7. FIELD METHODS

The town of Halstad is in Norman County, Minnesota, on the east bank of the Red River (Figure 1, page 3). The Wild Rice River of Minnesota/Red River confluence is less than 3 mi. upstream from Halstad. The flat prairie of this area is many miles wide, and is the main Red River terrace (an ancient floodplain), which is subject to flooding. The topography of the entire Halstad area is flat, rising very slightly in the central portion of town, but not enough to be out of flood danger. A large oxbow just south of the town limits has been bypassed by the river since before the town was established (Figure 2, page 5). This oxbow fills with water when the river floods, and usually contains standing water. This oxbow is outside the existing emergency levee.

Proposed COE flood control goals at Halstad include the following items, which were taken from the Scope of Work (Appendix I), Sections 4.03 through 4.08 (see Figure 2, page 5).

- 1) Existing emergency levee modification and improvement, which partially encircles the town, on the southeast, south, and west.
- 2) New levee construction is proposed for the northeast and much of the north town limits. This levee would connect with the existing levee on the east. The new levee may go on either side of the road where it passes the cemetery (site 21NR43H).
- 3) Existing levee realignment is an alternative at the loop, which now encloses a farm on the town's west edge.
- 4) Three holding pond locations are proposed, possibly with berms, which may necessitate some excavation:
- A. inside the existing levee in the southwest corner of town;
- B. outside northwest town limits, in an open field just north of a residential neighborhood (this holding pond area has an existing levee along part of its south boundary, and a new levee is proposed to further enclose the south boundary and also enclose the complete pond on the north);
- C. inside the existing levee in the west part of town (this location may be outside the levee system if the existing levee is realigned to exclude the west town farm now surrounded by a loop in the existing levee).

5) An interior drainage system consisting of a ditch and pipe, which would run along inside the existing levee on the south and empty into the proposed holding pond in the town's southwest.

Survey conditions were fair, some of the ROWs being along existing roadways, the existing levee, and on the edge of plowed fields. Vegetation along the ROW lines was high in some cases but was mowed in others (e.g., along the existing levee); therefore, although visibility of ground surface was limited in some areas, it was fair to good in Vegetation along the survey ROWs is mainly prairie grasses and weeds associated with road shoulders. The prairie surrounding the town would be practically all prairie grasses and forbs, but for the numerous cultivated fields. A windbreak of tall trees shelters the farm just west of town and is a prominent landmark. The riverbank is wellwooded and supports dense underbrush in most places. The holding pond and alternate existing levee realignment location on the west of town have small stands of brush and patches of high weeds, making visibility of ground surface somewhat more difficult. The realignment area itself was moved partially at the time of survey, particularly around the two structures of the Log Building site (21NR42H).

Topsoil of the area is dark loam with sandy alluvial and eolian silt inclusions—sometimes as small lenses—from ground surface to as deep as 30 cm. Underlying this organic topsoil is a stratum of clayey loam grading into alternating strata of sandy clays. The topsoil contains considerable humus from leaf decomposition in brushy and wooded places along the river.

Survey was done by close examination of the ground surface during pedestrian reconnaissance of all ROW lines and areas. Two archaeologists walked each ROW line, making zig-zag courses and reversing directions for additional longitudinal passage when necessary to effect a maximum 8 m radius scope of view for each person (Figure 3). Cultural specimens and artifacts were not collected from any location except the Riverside site (21NR29). The specimens collected from this site were brought to the HASI laboratory in Grand Forks for analysis, and are now curated at the MHS (see agreement in Appendix IV).

Five cultural resource sites were recorded; one of these--21NR40H, a historic site--is not located within any proposed ROW line or area. The remaining four sites (three historic--21NR39H, 21NR42H, and 21NR43H--and one aboriginal--21NR29) will be affected by proposed flood control measures (Figure 4, page 49). See site descriptions in the Investigation Results (Chapter 8., page 47), and MHS site forms in Appendix III.

PARTICION CONTRACTOR DESCRIPTION DE CONTRACTOR DE CONTRACT

Subsurface investigation in all cases was by shovel test, using a 1/4-in. mesh hardware cloth for screening. A total 24 such shovel tests were performed; 13 at site 21NR29, 8 at site 21NR42H, and 3 at site 21NR39H. Testing was not appropriate at the South Cemetery site (21NR43H), and not necessary at site 21NR40H which is not within any

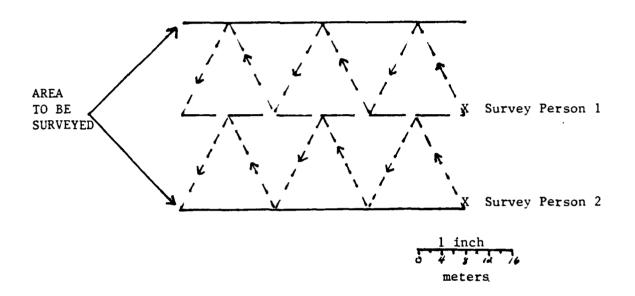


FIGURE 3. Survey Methods. (Note: All survey areas were surveyed using this method. Survey personnel were spaced not more than 16 m apart, and the zig-zag courses effected a maximum 8 m radius scope of view allowing each person to adequately investigate the ground surface.)

proposed flood control ROW line or area. Shovel test forms were completed for each shovel test performed, and are provided in Appendix V. Shovel test results are discussed in the Investigation Results (Chapter 8., page 47); those at site 21NR29 are illustrated in Figure 5 (page 57).

8. INVESTIGATION RESULTS

Five cultural resource sites were recorded during conduct of this cultural resource study (Figure 4); one of these--21NR40H, a historic site--is not located within any proposed ROW line or area. The remaining four sites (three historic--21NR39H, 21NR42H, and 21NR43H--and one aboriginal--21NR29) will be affected by proposed flood control measures. All five sites are described below; the fifth description is of that site which is not within any proposed ROW.

Subsurface investigation in all cases was by shovel test, using a 1/4-in. mesh hardware cloth for screening. A total 24 such shovel tests were performed; 13 at site 21NR29, 8 at site 21NR42H, and 3 at site 21NR39H. Shovel test forms were completed for each shovel test performed, and these are provided in Appendix V. The eight shovel tests at site 21NR42H and the three at site 21NR39H are described below, but are not illustrated. The 13 shovel tests at site 21NR29 are described below and illustrated in Figure 5 (page 57). Testing was not appropriate at the South Cemetery site (21NR43H), and not necessary at site 21NR42H which is not within any proposed flood control ROW line or area.

8.1 SOUTH CEMETERY SITE - 21NR43H

This site, a cemetery, is located in the SE1/4 SE1/4 SE1/4 SE1/4 of Section 19, T145N, R48W, on the north side of a section line road about 0.5 mi. east of Halstad (Figure 4). Elevation at the site is about 873 ft. (266 m) above Mean Sea Level (MSL). Vegetation is an introduced grass with cultivated hardwoods and conifers. Soil is dark organic loam to a depth of at least 30 cm, underlaid by lighter color sandy clays.

The site is a Euro-American cemetery with 187 graves evidenced by markers, slight depressions, etc. The depth of the cultural component is predicted to be approximately 6.9 ft. (2.1 m) to the base of the grave pits. Names on the headstones are all Euro-American, with Scandinavian surnames predominating. The oldest marked headstone is dated 12 January 1891.

The cemetery is maintained by mowing and custodial methods and it is in very good condition (Plate 1, page 71). It also apparently is still available for use. Because the site is regularly maintained, no artifacts except perishable wind-deposited refuse were seen on the surface, and no cultural material was collected from the surface. Subsurface testing was not appropriate at this site.

The site's location is directly related to the population it serves and represents: the people of Halstad and vicinity. Its position is not related to any particular physiographic or topographic feature except that it is in a convenient level place, and away from the present population center. Placement of the cemetery with relation to vegetation or soil types apparently was not a factor in selecting its location.

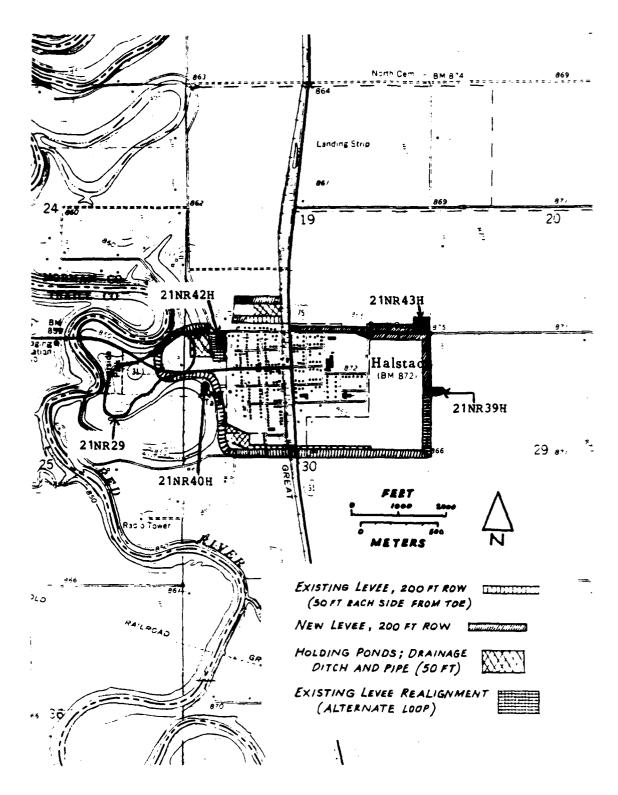
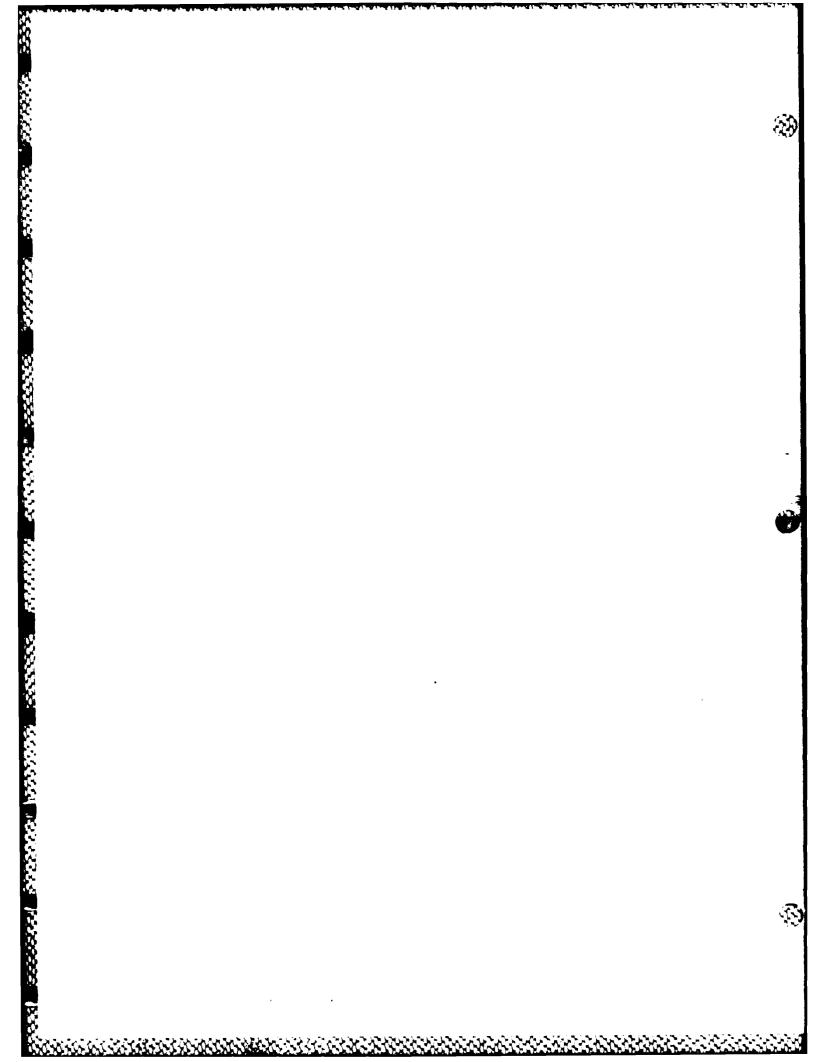


FIGURE 4. Five Cultural Resource Sites Recorded in Halstad Project Area, and Their Relationships to Proposed Flood Control Measures (from U.S.G.S. 7.5' topo quad map, "Halstad, Minn.-N.Dak." 1963).



8.2 HOMESTEAD SITE - 21NR39H

This site, a rural dwelling locus, is situated on the southwest corner of an intersection of a farm fieldroad with a north-south section line road, about 0.25 mi. east of Halstad town limit, in the SW1/4 SW1/4 NW1/4 NW1/4 of Section 29, T145N, R48W (Figure 4). Elevaion at the site is about 868 ft. (265 m) above MSL. Potential natural vegetation of the area is prairie grasses and forbs; grasses, forbs, and introduced weeds presently predominate. There are no trees at the site. Soil is dark organic loam from surface to a depth of at least 30 cm, at some places deeper. This is underlaid by a lighter color sandy clay.

This is a Euro-American, early 20th century rural dwelling site, as evidenced by cultural material scattered on the surface (Plate 2, page 71). The site's size is 30 m north-south by 65 m east-west, as defined by the surface scatter of artifacts, which is of medium density with apparently random concentrations. Artifacts include scraps of metal, sherds of glass and domestic ceramics, and indicate the former presence of a residential dwelling. However, no foundation or other architectural features, and no architectural materials such as concrete or brick were noted. Farm implement pieces were not found, and no indication was found to suggest existence of a barn at the site.

Plowing has disturbed and mixed the artifacts at this site thoroughly, and culturally sterile soil was noted below the approximate 18 cm limit of depth of the cultural deposit. The extent of the original subsurface cultural deposit probably was less than the present surface manifestation of cultural debris, because the site apparently has been plowed many times.

The location of this site possibly was established because of convenience to the public road and proximity of the adjacent community of Halstad. If any physiographic or topographic features were factors in its being located in this particular spot, they are unknown; the vicinity is a flat prairie with good view in all directions. The site is not subject to direct flooding by the river, but rainwater runoff from the immediate area occasionally accumulates in pools around and at the site. Cultural integrity of the site is poor because of its poor physical condition.

Tests at Homestead Site (21NR39H) consisted of three shovel tests to a depth of about 30 cm. The entire area has been plowed or otherwise disturbed by cultivation, and the depth of the plow zone is about 20 cm over the site. Definition of the site was originally by the limits of the artifact scatter. After shovel tests and further close examination of the site vicinity, it was evident that no architectural remains or other such features exist. The site, therefore, is considered a simple scatter of cultural material with no additional features. Cultural material originally was restricted to the surface, so far as can be determined, and no subsurface deposit exists except that which has resulted from recent burial by cultivation in the top 20 cm. Hard unplowed prairie loam topsoil is below this top 20 cm.

8.3 LOG BUILDING SITE - 21NR42H

The Log Building site consists of two structures located on the northwest edge of Halstad, west of a residential neighborhood and just inside the town limits, in the NE1/4 NW1/4 NW1/4 of Section 30, T145N, R48W (Figure 4). Elevation of the site is about 865 ft. (264 m) above MSL. Vegetation consists of prairie grasses and forbs, which are kept mowed. A few trees stand within 40 m to the north. Soil is a dark sandy loam from surface to as much as 35 cm depth, underlaid by a lighter, sandy clay with organic components. Occasional gravels and pebbles are found in the soil, but it is relatively free of cobbles and boulders in the site vicinity.

The site has two structures, one a log structure now covered with corrugated sheet steel and the other a barn sided with sheet steel. The site is contained in an area 50 m by 50 m. A 1910 plat map of the Halstad area shows a structure designated "creamery" in the vicinity of this site (see discussion on page 35 of Chapter 4., Regional Human Occupation). Correlation of that small scale plat map with the modern U.S.G.S. map (Figure 4) does not surely place the creamery at the Log Building site, but it was possibly in the near vicinity.

The log building at this site (Plate 3, page 73), 9.0 m north-south by 5.6 m east-west, is constructed of broad-axed (rectangular cross-section) logs with sawed ends, pieced end to end in the side walls, but full-length at the front and rear of the structure. The lowest course of logs apparently was discarded when the structure was moved; now it sits atop a concrete wall foundation. It is sided and roofed with corrugated steel. The interior construction has not been obliterated, except the left floor timbers were truncated after the building was lowered and moved. The building is open to the east by a large doorway, and to the south by a double doorway without doors.

A woodframe barn, 28.0 m north-south by 11.1 m east-west (Plate 3, page 73) is located about 21 m east of the log building. Like the log building, this barn has been lowered, apparently because of deterioration of the lower walls, and it is not in its original location. The roof is gambrel style, and sheet steel has been used for roofing. Sheet steel also has been used as siding on the east and west exteriors. Wood clapboard and plank siding is still in place on the north and south. This barn is used as an equipment garage and is entered from the north through large sliding doors. It is not open to the weather or to public access.

Both structures at this site have been crudely wired for electricity; probably neither was wired before being moved to the present site. Neither of the structures has a substantial foundation and both have been lowered by removal of about 40 cm of the lower walls, excellent indication that neither is on its original site. About 5 m north of the log building is a mound of earth, and another mound of earth is 15 m southeast of the log building. The U.S.G.S. quadrangle map Figure 4) shows that there were three noccupied structures at this site in about 1960. Cultural material was not found on the surface

around the two standing structures or around the two mounds, and no evidence of a third structure (as indicated on the 1960 U.S.G.S. map) was noted on the surface.

Relationship of the physiography and topography to the architectural features at the Log Building site are not apparent, except the place is level and relatively free of large stones. Neither structure rests on its original foundation. Both apparently were moved onto the site as recently as 35 years ago. At that time or later, each building received a sheet metal roof and sheet metal siding improvements. The log building interior shows that it was never plastered, but may have had plank walls. At one time it had a loft floor, but the timber support joists were removed. It appears that this building was never a residence: it is very large inside, has an unfinished under-roof, shows little evidence of being finished inside, has no windows except two small vent-like openings, and has a double doorway on one end (now the south facade) and a large doorway in its present east wall. Both buildings apparently were reduced in height by removing a portion of the lower walls before they were put on their present foundations, probably because the lower walls were deteriorated.

Tests at Log Building Site (21NR42H) consisted of eight shovel tests. Three tests on the north edge of the site revealed that the mound here is of recent deposition, composed of organic soil mixed with topsoil gravels. No artifacts were found in the 30 cm deep shovel tests, and no anomalies were noted. Another shovel test was made on the south edge of the site, and it revealed the low mound here to be of similar origin and composition. Apparently, these two earth mounds are fill soil which has been bladed up from the vicinity, perhaps in part during construction of foundations for the two buildings at the site.

The barn (on the east edge of the site) has a recently-made concrete floor. A test against its south wall revealed a concrete wall foundation about 35 cm deep, with a slightly projected footing.

The log building (on the site's west edge) has a concrete floor which was poured separately, and a plank floor which was put atop the slab. Three shovel tests around the base of the walls revealed a concrete foundation wall about 30 cm deep, without projected footing.

No evidence indicating that previous or additional structures existed at this site was revealed during shovel testing. No subsurface evidence of the previously mentioned creamery was found during shovel testing.

8.4 RIVERSIDE SITE - 21NR29

This site is an aboriginal cultural material scatter contained mainly within the west-most loop of the existing levee, but extending outside the levee westward and southward, in the NE1/4 NE1/4 of Section 25, T145N, R49W and the W1/2 NW1/4 NW1/4 of Section 30, T145N, R48W

(Figure 4). Elevation at the site is approximately 860 ft. (262 m) above MSL. Potential natural vegetation is prairie grasses and forbs, and possibly hardwood forest at this proximity to the river. Modern cultural activity (roads, farmstead, plowing, windbreak trees, etc.) has affected the site heavily, and vegetation now consists of prairie grasses and forbs, and numerous introduced plants (particularly around the farmstead, which is centered in the site). A windbreak immediately northwest of the farmstead primarily contains introduced species of trees and shrubs. At the time of HASI's pedestrian survey, the north and east portions of the site were under cultivation. Soil at the site is sandy loam to a depth of at least 35 cm, and is underlaid by sandy clay with organic components.

The site is an aboriginal cultural material scatter, probably with prehistoric component, and extends about 220 m southwest to northeast by 170 m northwest to southeast (Plate 4, page 73). Aboriginal shell-tempered or grit-tempered, cord-net-impressed pottery (which was burnished inside before firing) is represented by 13 sherds from the site's surface. A small Knife River flint flake, various small quart-zite chunks, mussel shell fragments, a chalk tube fragment, and small fragments of mammal bones were also found. These specimens are discussed below. In several places within the site's boundaries, plowing probably has been responsible for bringing some, if not all, of the artifacts to the surface.

Since the artifacts collected from this site's surface have been displaced by plowing, speculations about their relationships to possible subsurface features will not be made. Discussions of collected cultural material follow; these materials have been curated at MHS (see letter of agreement in Appendix IV).

Two fragments of freshwater mussel shells were recovered. In view of the river a short distance away, their presence is not unusual. There is no evidence of modification to these specimens; their broken condition is attributed to plowing at the site.

Nine small fragments of opaque quartzite, dull whites and gray-pinks in color, were collected. None can be definitely said to have been purposely knapped from a core, because of their natural flat fracture and fragmentary condition.

One Knife River flint flake, without remnant cortex or patina, probably is from core preparation. The specimen is about 17 mm (bulbar end to distal) by 9 mm wide by 2 mm thick, and is a translucent light brown color not unlike Knife River flint specimens from central North Dakota.

Three small, unidentifiable mammal bone fragments and an ungulate (bovine?) tooth fragment are not attributable to any particular cultural component, and their appearance on the surface makes them of little diagnostic consequence.

A half-tubular piece of ultramarine blue chalk, very deteriorated, probably is the remains of a recent (mid-20th century or later) child's

toy, but its possible protohistoric temporal provenience cannot be ignored. No reference to chalk beads in the professional literature is known, however, and unless subsurface, in situ discovery of similar material is made in future, the specimen must be classed as Euro-American.

Thirteen aboriginal ceramic sherds were collected from the surface. Twelve sherds are tempered with grit (in this case decomposed granitic material), while the remaining specimen is tempered with thin pieces of shell. Four sherds are split—i.e., weathered to such an extent that only one surface is present. Of the remaining nine sherds, five are cord—marked, while four display plain, but probably smoothed, surfaces. Sherds range from 4 mm to 7 mm thick, with surface colors ranging from buff to dark gray. No complete rim sherds were collected, but one small specimen appears to have been broken immediately below the lip.

HASI's 1981 ceramic collection from 21NR29 is small and contains no diagnostic rim sherds. There is no reason to believe that these specimens represent a ceramic type different from Sandy Lake Ware of the Late Woodland Period. Michlovic (1981b) classified the ceramics he collected from 21NR29 as Sandy Lake Ware on the original site form (in MSAO--MHS site files), and in his preliminary report.

Original occupation of this site probably was influenced greatly by proximity to the river, with its associated food flora and fauna. The site is located between two oxbow meander loops, the south-most of which now is bypassed by the river channel (Figure 4, and Plate 4--page Nevertheless, even if this south meander loop had been abandoned by the river before occupation of the site, the river was accessible less than 200 m northwest of the site. The riverbank is wooded heavily today and probably was at the time of the first occupation. The surrounding prairie probably supported a luxuriant growth of prairie grasses and forbs. A creek enters on the same side (east) of the Red River--downriver 1.7 km (south)--and the Wild Rice River of Minnesota enters 3.9 km south, again on the east side of the Red River. Convenient access to a variety of microenvironments, therefore, made this place an excellent location for human habitation. Other aboriginal cultural resource sites probably exist within a 4 km radius of the Riverside site, particularly around the Wild River River confluence. no other sites within the Halstad Flood Control Project survey ROW lines or areas are recorded with the Minnesota authorities (MSAO--MHS) and no others within survey ROWs are reported in available literature (see Chapter 2, page 9, and Chapter 4, page 23).

Tests at Riverside Site (21NR29) consisted of 13 shovel tests (Figure 5). The locations were chosen to correspond with the site boundary estimated by the original HASI survey team on 26 September 1981. The site boundary as reported by Michlovic in 1980 extended at least 700 m southwestward from the southwest limit established by HASI, but did not include the northeast portion as estimated by HASI in 1981. The total site area as estimated by both Michlovic and by HASI is shown in Figure 4, and the difference between the two is shown on the site form contained in Appendix III.

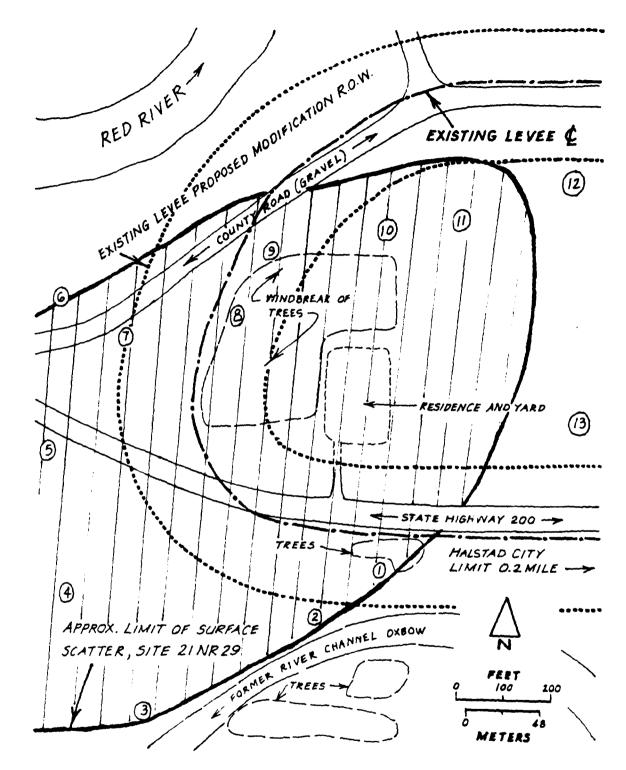


FIGURE 5. Shovel Test Locations at Site 21NR29 (circled numbers) (Map adapted from photocopy map which accompanied the COE Scope of Work).

None of the 13 shovel tests revealed any cultural materials. All tests were at least 35 cm deep and the southern-most five tests were dug to 40 cm. A 1/4-in. mesh hardware screen was used for the soil removed, but no specimens were revealed. In most cases, the top 15 cm was muddy, but soil was fairly dry below that depth.

Discussion of archaeological deposits in the surrounding area was presented in previous chapters of this report. It is supposed that cultural deposits at this site could occur to a depth of 2 m (6.6 ft.), because some aboriginal (prehistoric) river terrace sites in the immediate region exhibit this characteristic. If components deeper than 40 cm exist at this site, they were not encountered by HASI shovel tests on 26 October 1981.

8.5 POTATO HOUSE SITE - 21NR40H

This site, a historic potato storage building and associated foundation pit, is located in the SW1/4 NW1/4 NW1/4 of Section 30, T145N, R48W, immediately southwest of the Log Building site (described above), and south of the existing levee (Figure 4). It is not within the proposed existing levee ROW survey line--it is about 57 m (187 ft.) south of the south toe of the existing levee--but it is described briefly because it was recorded by the reconnaissance survey crew. Elevation of the site is about 860 ft. (262 m) above MSL.

Size of the site is about 15 m north-south by 25 m east-west, an area which includes the site's two features. The main feature is a concrete barrel vault potato storage building, covered with earth, and now abandoned (Plate S, page 75). The date 1929 was found inscribed in concrete on an inside wall. The structure has three rectangular openings in its roof, plus a pipe vent. The vault is supported inside by four concrete piers (see MHS site form in Appendix III). A rectangular dug-out foundation pit, which has been used for recent trash deposition, is located on its east side. This pit is connected with the potato house on the north and by a concrete passageway. At one time, a roof probably existed above this pit, but evidence of its existence is not now obvious.

The potato storage house is an Euro-American structure, built in 1929. An additional inscribed date, 1939, shows modification to the potato house, and is an indication that it was in use for at least 10 years.

The site is subject to flooding, but because it is abandoned and not within the proposed existing levee ROW, no further action need be taken.

9. EVALUATION AND CONCLUSIONS

Three cultural resource sites were recorded and one cultural resource site was re-recorded within ROW lines and areas of the proposed Halstad Flood Control Project (Figure 4, page 49). A fifth site was recorded by HASI archaeologists, but is not evaluated or discussed below because it is outside all proposed ROW lines and areas (Figure 4, page 49). Of the four sites discussed below, three are historic and one is aboriginal.

South Cemetery Site (21NR43H) - is a Euro-American cemetery which has served the Halstad area as a burial ground since about 1891, the date of the earliest marked headstone (Figure 4, page 49). Another cemetery in the community, North Cemetery, is 1 mi. north, and is of similar cultural affinity, although it contains fewer graves.

There are no unusual features within the boundaries of South Cemetery. A variety of headstones exist (Plate 1, page 71), but there are no above-ground tombs, and no evidence of crypts; all burials are apparently of the usual 6 ft. (nominal) depth. The survey team counted 187 graves, some represented simply by mounded or sunken places. No particular community disaster is known to have occurred and no such event is reflected in the cemetery. Unusual changes or modifications at the site are not in evidence, and the neat, unfenced appearance is one of tranquility. This is sufficient reason to believe the cemetery is not simply an historical site, but a place of contemporary cultural importance.

There appears to be no historically unique aspect making this cemetery more important to the community of Halstad or Norman County than is normal for an extant cemetery. Undoubtedly, numerous residents of Halstad have buried deceased relatives in this cemetery. Serious modification of the cemetery grounds or relocation of graves will not be possible without intimate involvement of Halstad citizens.

The cemetery would be affected by the proposed new levee if that levee exceeded the limits of the present section line roadway ROW. Construction of the levee on the south side of this road probably would not impact the cemetery (Figure 4, page 49). Indirect esthetic impact would occur if any construction were done in the vicinity, but this should not necessitate cultural resource mitigation.

Homestead Site (21NR39H) - is a Euro-American, early 20th century rural dwelling site, as evidenced by numerous historic, domestic artifacts scattered on the surface. No foundations were found, despite the exposure by recent plowing. The site has been plowed many times and subjected to other disturbances associated with cultivation.

The site is about 0.5 mi. from Halstad's central intersection, and therefore was a part of the historic demography (Figure 4, page 49). The dearth of plastic objects and recent debris indicates the site was abandoned by the early 1950s, if not before.

Very few artifacts found at this site pertain to farmstead occupation; pieces of farm machinery and related implements were not noted. Essentially, all cultural specimens are artifacts which can be expected from a residence: crockery and other household ceramics; sherds of glass containers, canning lid linear fragments, and "pressed glass" objects; and small scraps of metal, small nails, etc. Although no evidence of burning was noted in the debris or in the surrounding plowed fields, this site could be simply a dump. Perhaps no architectural feature ever existed at this site.

Relationship of this site to the town of Halstad is implicit because of its proximity to that center of population. It must be assumed, however, that this site represents a rural component of the community history, because no other historic sites are known in its vicinity. Definite cultural affinities or temporal associations were not established during the documentary research undertaken for the project (see Chapter 10., Recommendations, page 65).

Three shovel tests were performed at this site; no cultural material was discovered through the tests.

Log Building Site (21NR42H) - is a Euro-American site with two structures and two historic mounds. A very sparse scatter of historic artifacts around the site pertains mainly to very recent use of the site as a playground by children in the residential neighborhood immediately east (Figure 4, page 49). This site has been bladed and land-scaped to accept the two buildings; the two mounds of topsoil demonstrate the extent of previous disturbance.

The log building and nearby barn both were moved to the site. The log building has been altered considerably, particularly by the addition of metal siding and roofing, and by the loss of its bottom course of logs. The barn also has been lowered by removal of a portion of the walls' bases. Although the log structure is interesting, neither it nor the bar: (now an equipment garage) retain sufficient integrity to make them architecturally significant, and documentary research failed to show either structure to be historically important.

Both structures appear to have been used only for storage after relocation at this site. The log building has no doors and is open to the elements. The barn is closed. Details about the history, ownership, and modification of these structures, and their relationship to the two recent earthen mounds at the site, were not discovered during documentary research for this project (see Chapter 10., Recommendations, page 65). Although both structures were wired for electricity at some time in the past, there was no evidence that either was ever used as a dwelling.

A "creamery" structure shown on a 1910 plat map of the Halstad area apparently was in the near vicinity of this site, but correlation of the plat map location with the 1963 U.S.G.S. map (see Figure 4, page 49) was too approximate to determine the exact creamery location. Shovel tests did not reveal any subsurface deposits of cultural material

or architectural features at the site. Information about a creamery was not discovered during documentary research (except the 1910 plat map). We conclude that no pertinent physical evidence of a creamery can be found at the site without extensive testing, and because of shovel test results and lack of documentary data, further subsurface testing is not warranted.

Eight shovel tests were performed at the Log Building site; no cultural material was discovered through the tests.

Riverside site (21NR29) - is an aboriginal cultural material scatter. Aboriginal pottery sherds, a Knife River flint flake, various small quartzite chunks, mussel shell fragments, a chalk tube fragment, and small fragments of mammal bones were found scattered on the site's surface. Much of the site area has been plowed repeatedly for years, and this plowing likely is responsible for bringing some, if not all, cultural materials to the surface. State Highway 200 cuts across the site from east-west, and a county road traverses its northwest edge. The existing levee traverses the site north-south across its east one-third. Landscaping and brush clearing for Riverside Park have affected the site's west edge (Figure 4, page 49).

Thirteen shovel tests were performed at this site; no cultural material was recovered from any of the tests. As indicated in Chapter 2. (page 9), geologists from North Dakota State University (NDSU) have suggested that there is reason to believe that subsurface deposits along Red River levees likely are buried under 5 ft. to 6 ft. of clay and silt (Michlovic 1981e), and it is possible that any subsurface cultural materials at this site would be buried deeper than the depth of the shovel tests (35 cm to 40 cm).

Significance of the Riverside site is not readily apparent. Portions of the surface of this site have been disturbed; however, the possibility exists that undisturbed cultural deposits remain deeply buried at the site (see Chapter 10., Recommendations, page 65).

The existing levee traverses the site (Figure 4, page 49). Any modification of the levee will affect the site, but not necessarily adversely, because original levee construction already has disturbed the site. If the existing levee alternate alignment loop is constructed, the Riverside site will not be affected directly.

10. RECOMMENDATIONS

Proposed Halstad Flood Control Project construction measures will affect at least two known cultural resource sites directly, and at most three sites will be affected directly. Four sites were recorded within proposed ROW lines and areas, but two alternates exist (Figure 4: page 49): 1) existing levee loop realignment (northwest area), and 2) cemetery bypass in new levee (northeast area). A fifth site was recorded during reconnaissance survey, but it is not within any proposed ROW lines or areas.

The Homestead site (21NR39H) site will be affected by the new levee regardless of any alternatives. If the existing levee loop realignment is chosen, the Riverside site (21NR29) will not be affected directly, but the Log Building site (21NR42H) will be affected (Figure 4, page 49). If the existing levee loop realignment is not chosen, the Riverside site will be affected directly, and the Log Building site will not. If the cemetery bypass is chosen, the new levee will not affect the South Cemetery site (21NR43H) directly, thereby reducing the number of directly affected sites to two. A fifth site (Potato House site, 21NR40H) was recorded during reconnaissance survey, but since it is not within any proposed ROW lines or areas, it will not be affected directly by any proposed flood control measures.

Twenty-four shovel tests were conducted at three of the four sites which will be affected directly by proposed flood control measures (13 at Riverside site, 8 at Log Building site, and 3 at Homestead site). No tests were conducted at the South Cemetery site. No subsurface cultural material deposit was discovered at any site.

Other than those sites recorded during the present survey, no other known or recorded cultural resource sites will be affected directly by proposed flood control measures. No properties in or around Halstad are listed on the NRHP, therefore no current NRHP properties will be affected by flood control measures.

The Potato House site (21NR40H) is of some architectural interest, but it is not within any proposed ROW line or area. It will be affected indirectly by modification of the existing levee, but impact will not be so serious as to warrant further study.

The significance of the <u>South Cemetery</u> site (21NR43H) is its socio-religious historic character as the symbolic resting place of ancestral spirits. More cogent in relation to the proposed flood control project is the cemetery's current use as a burial ground, and therefore, the political and emotional repercussions its disturbance will cause. In light of these factors, its potential of being accepted for nomination to the NRHP is high. The alternate new levee route which avoids the cemetery should be chosen.

The <u>Homestead</u> site (21NR39H) is a site whose historic significance is decreased because it has been disturbed seriously by plowing. Cultural material is mixed, horizontally and vertically, and is damaged

considerably. Subsurface archaeological investigation probably would not be fruitful because of the disturbed nature of the site's cultural material deposit. The site's potential to produce evidence (by further documentary research or subsurface investigation) to support NRHP eligibility is low, thus its potential as an NRHP nominee is low.

The Log Building site (21NR2H) is a site with two architecturally-quaint structures, which have been moved from their original locations, and their original compositions now are altered. The log structure has lost considerable historic integrity from its alteration, and the nearby barn structure is not in itself architecturally unique. Neither of these structures are apparently sufficiently significant for nomination to the NRHP.

The "creamery" structure (discussed in previous chapters) shown on a 1910 plat map to be in the vicinity of the Log Building site was not revealed on the site's surface or through shovel testing at the site. Its exact location is unknown, and correlation of the 1910 plat map with the 1963 U.S.G.S. map (see Figure 4, page 49) is not helpful. It is possible that it was not located at this site, although it may have been located in the near vicinity. How long before 1910 the creamery existed is not revealed in available documentary data, but in 1918, the community's only creamery was still being operated by the Halstad Cooperative Creamery Association (Turner and Semling 1918).

The Riversite site (213R29) is an aboriginal cultural material scatter. Although portions of the site's surface have been disturbed and shovel tests did not uncover any buried cultural material deposits, the possibility exists that undisturbed cultural deposits remain deeply buried at the site, and the site therefore has potential NRHP significance. It is recommended that subsurface tests be performed at the Riverside site if it is to be impacted by proposed flood control measures.

Subsurface tests at the Riverside site should have the following primary goals.

- 1) Discover the limits of the site's subsurface deposit. The surface cultural material scatter has been disturbed considerably by plowing, and it probably does not indicate true site boundaries.
- 2) Discover the nature and depth of any existing subsurface deposits.
- 3) Determine the number of separate cultural strata and components at the site.
- 4) Investigate the relationship of this site to nearby aboriginal sites.

The method of investigation suggested for this site is a probe of the site to determine depth of cultural components by use of at

least four trenches or pits to a depth of 2 m (6.6 ft.). be done by hand or machinery. If no cultural deposit is discovered, the investgation should be discontinued. Location of the test pits should be restricted to areas which would be affected directly by proposed flood control construction. This will not establish limits of the site or its deposit, but should furnish sufficient data to determine NRHP eligibility and to assist in further COE planning. If deep cultural deposits are discovered, boundaries of the site's deposit should be estimated by digging pits of appropriate depth (i.e., to the deepest known cultural strata) at places where site boundaries are indicated by surficial cultural manifestations. Concomitant documentary research is appropriate to investigate the relationship of this site's cultural deposits with deposits at similar sites in the immediate region.

Four pits dug to a 2 m (6.6 ft.) depth by a backhoe, and other fieldwork (screening, cataloguing, recording, field curation, etc.) would require approximately 200 person-hours in the field and 300 person-hours in the laboratory, followed by approximately 400 person-hours report preparation. The amount of field hours would triple if hand labor is used rather than a backhoe. Additional documentary research would require perhaps 100 person-hours. Total estimated cost of testing (using backhoe) is provided below.

Backhoe rental (40 hrs.)	\$ 700.00
180 field hours at \$6.00/hr.	1,080.00
700 hours laboratory and	
report at \$6.00/hr.	4,200.00
Transportation, per diem, etc.	800.00
TOTAL Estimate	\$6,780.00

In summary, HASI recommends further documentary research associated with two of the historic sites within proposed ROWs: Homestead site (21NR39H) and Log Building site (21NR42H). South Cemetery site (21NR43H) should be avoided by choosing the ROW route south of the section line road at the cemetery. HASI recommends no further subsurface tests by excavation at any of the three historic sites (21NR39H, 21NR42H, or 21NR43H). Additional subsurface tests at Riverside site (21NR29) are recommended if the site will be impacted by proposed flood control measures.

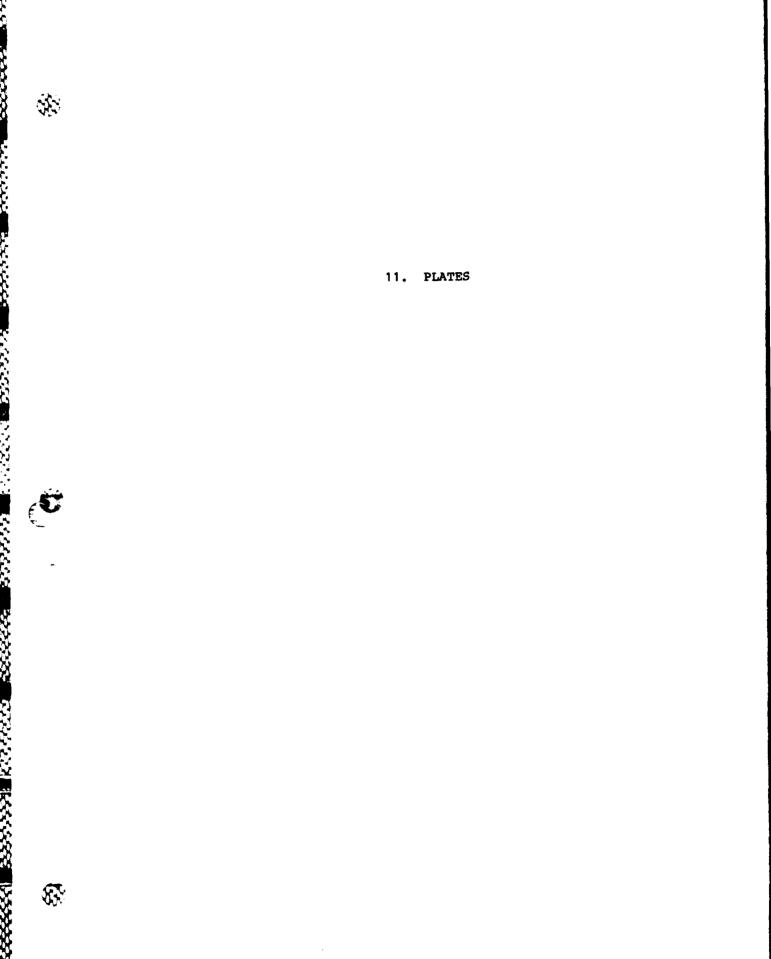




PLATE 1. South Cemetery Site--21NR43H--looking southeast.



PLATE 2. Homestead Site--21NR39H--looking east.



PLATE 3. Log Building Site--21NR42H--looking northwest.

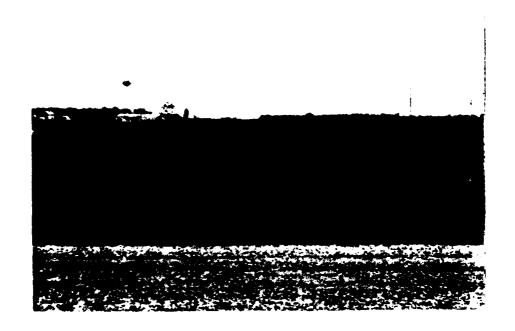


PLATE 4. Riverside Site--21NR29--looking south from section line road.

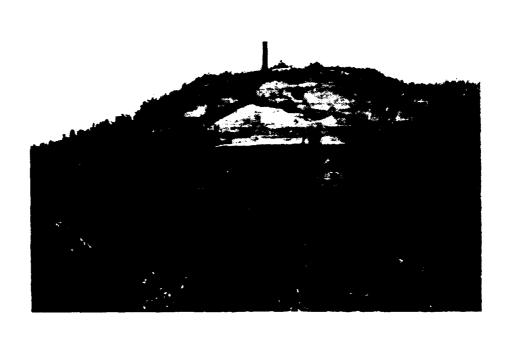


PLATE 5. Potato House Site--21NR40H--looking north.

12. LIST OF REFERENCES

Andreas, A.T.

1884 Andreas Historical Atlas of North Dakota. Chicago, IL:R.P. Donnerley and Sons.

Anfinson, Scott (ed.)

1979 "A Handbook of Minnesota Prehistoric Ceramics." Occasional Publications in Minnesota Anthropology #6.

1981 Personal communication. Telephone conversation, 9 October 1981, between Anfinson (Minnesota County Highway Archaeological Program) and Dr. Norene Roberts (HRI)--under subcontract to HASI.

, Michael G. Michlovic, and Julie Stein

1978 The Lake Bronson Site (21KT1): A Multi-Component Prehistoric Site on the Prairie Woodland Border in Northwest Minnesota.

Minnesota Archaeological Society. St. Paul, MN.

Arneman, H.F.

1963 Soils of Minnesota. Extension Bulletin, June. U.S. Department of Agriculture.

Arthurs, David

"Sandy Lake Ware in Northwestern Ontario: A Distribution Study." Manitoba Archaeological Quarterly 2(1-2):57-64. Winnipeg, Manitoba, Canada.

Birk, Douglas A.

1977 "Two Sandy Lake Ware Vessels from Onigum Point, Cass County, Minnesota." The Minnesota Archaeologist 36(1):9-15.

1979 "Sandy Lake Ware." In: A Handbook of Minnesota Prehistoric Ceramics. Compiled and edited by Scott F. Anfinson. Occasional Papers in Minnesota Anthropology, No. 5:175-182.

Borchert, Hohn R. and Neil C. Gustafson

1980 Atlas of Minnesota Resources and Settlement (third edition).

Center for Urban and Regional Affairs, University of Minnesota and the Minnesota State Planning Agency. St. Paul, MN. pages 38-48.

Bouler, Mary Jane

The Sioux Indians and the U.S. Government 1862-1878. Masters Thesis. Washington University. St. Louis, MO.

Bowers, A.W.

1965 Hidatsa Social and Ceremonial Organization. Washington, D.C.: U.S. Government Printing Office.

Carley, Kenneth

1976 The Sioux Uprising of 1862. Minnesota Historical Society. St. Paul, MN.

Coues, Elliot

The Manuscript Journals of Alexander Henry and David Thompson.
Minneapolis, MN:Ross and Haines, Inc.

Densmore, Frances

"Use of Plants by the Chippewa Indians." Forty-fourth annual Report of the Bureau of American Ethnology, 1926-1927. Washington, D.C.: U.S. Government Printing Office.

Elson, John A.

"History of Glacial Lake Agassiz." <u>In:</u> Problems of the Pleistocene and the Arctic, Volume 2(2). McGill University Museums.

Frison, George C.

1978 Prehistoric Hunters on the High Plains. New York, NY:Academic Fress.

Gilman, Rhoda R., Carolyn Gilman, and Deborah M. Stultz

1979 The Red River Trails: Oxcart Routes between St. Paul and the Selkirk Settlement, 1820-1870. Minnesota Historical Society. St. Paul, MN.

Grinnell, George B.

1972 Cheyenne Indian, Volume I. Bison Book. Lincoln, NE:University of Nebraska Press (reprint).

Heinselman, Miron L.

1974 Interpretation of Francis J. Marschner's Map of the Original Vegetation of Minnesota. Unpublished typescript on file at the North Central Experiment Station (USDA). St. Paul, MN.

Hickerson, Harold

"The Genesis of a Trading Post Band: The Pembina Chippewa."

Ethnohistory 3(4). Bloomington, IN:University of Indiana
Press. From: Schweigert 1977. Historic Sites Cultural
Inventory in the Devil's Lake Region, Central Project Areas,
Garrison Diversion Unit, North Dakota. Submitted to the U.S.
Bureau of Reclamation.

1970 The Chippewa and Their Neighbors. New York, NY:Holt, Reinhart and Winston.

Jablow, J.

1950 "The Cheyenne in Plains Indian Trade Relations, 1795-1840." American Ethnological Society, Monograph 19. Seattle, WA:University of Washington Press.

Jennings, Jesse D.

1974 Prehistory of North America (second edition). McGraw-Hill Book Co.

Johnson, Eldon

1962 "The Prehistory of the Red River Valley." Minnesota History 38(4) December.

1964 "Artifacts and Glacial Lake Agassiz Beaches." Minnesota Archaeologist 26(1) January.

1973 "The Arvilla Complex." Minnesota Prehistoric Archaeology Series, No. 9.

Joyes, Dennis

1970 "The Culture Sequence at the Avery Site at Rock Lake."

In: Ten Thousand Years: Archaeology in Manitoba. Edited by
W. Hlady. Manitoba Archaeological Society.

Keating, W.H.

Narratives of an Expedition to the Source of the St. Peter's River Performed in the Year 1923. Minneapolis, MN:Ross and Haines, Inc. (Reprint of the 2-volume, 1824 ed.)

Kellogg, Louise Phelps

1917 Early Narratives of the Northwest, 1634-1699. New York, NY:Charles Scribners Sons.

Lane, Richard B.

1978 A Records Search for the Location and Documentation of Historic/Archaeological Sites Located on Waterfowl Production Areas in 19 Minnesota Counties and 7 Wisconsin Counties: Archaeological Survey and Testing of Two Prehistoric Sites Located on National Wildlife Refuges in Illinois. U.S. Fish and Wildlife Service. Twin Cities, MN.

Lee, Charles H.

1897 The Long Ago. Walhalla, ND: Semi-Weekly Mountaineer.

Lugenbeal, Edward

"The Blackduck Ceramics of the Smith Site (21KC3) and Their Implications for the History of Blackduck Ceramics and Culture in Northern Minnesota." Midcontinental Journal of Archaeology 3(1). From: Anfinson 1979. A Handbook of Minnesota Prehistoric Ceramics. Occasional Publications in Minnesota Anthropology, No. 6.

MacNeish, Richard S.

1958 "An Introduction to the Archaeology of Southeastern Manitoba." In: Museum of Canada Bulletin, No. 157.

Marschner, Francis J.

The Original Vegetation of Minnesota: Compiled from U.S. General Land Office Survey Notes. North Central Experiment Station (USDA). St. Paul, MN.

- Meyer, Roy W.
 - 1967 History of the Santee Sioux. Lincoln, NE:University of Nebraska Press.
- Michlovic, Michael G.
 - Report on the Cultural Resources in the Vicinity of the Wild Rice Watershed District Proposed Rock Bank Protectors. Unpublished manuscript on file with the Minnesota State Historic Preservation Office and Moorhead State University Anthropology Laboratory.
 - 1977 Cultural Resources Survey of Three River Bank Stabilization Construction Sites in Clay and Norman Counties, Minnesota. Conducted for Houston Engineering of Fargo, ND.
 - 1978 Archaeological Survey and Testing in M.B. Johnson Park, Moorhead, Minnesota. Conducted for Moorhead, Minnesota's Parks and Recreation Department.
 - 1979 Preliminary Report on the Archaeological Survey of Clay County, Minnesota, 1978. Unpublished manuscript on file with the Moorhead State University, Department of Anthropology. Moorhead, MN.
 - 1981a Archaeological Reconnaissance at the Moccasin Creek Flood Detention Structure Site, Norman County, Minnesota. Conducted for Houston Engineering of Fargo, ND.
 - 1981b Preliminary Report on the Middle Red River Archaeological Survey, Norman County, Minnesota. Unpublished manuscript submitted to the Minnesota Historical Society, the Minneapolis Foundation, and Moorhead State University.
 - 1981c The Red River Valley in the Prehistory of the Northern Plains. Paper presented at the 39th Plains Anthropological Conference. Bismarck, ND.
 - 1981d Personal communication. Telephone conversation, 23 October 1981, between Michlovic (Professor of Anthropology, Moorhead State University, Moorhead, MN) and Dahlberg (HASI staff person).
 - 1981e Personal communication. Letter dated 21 October 1981 from Michlovic (Professor of Anthropology, Moorhead State University, Moorhead, MN) to Dahlberg (HASI staff person).
- Moodie, E.W. and A.S. Ray
 - 1976 "Buffaloe Migrations in the Canadian Plains." Plains Anthropologist 21(71):42-52.
- Mott-Wedel, M.
 - "Le Seur and the Dakota Sioux." In: Aspects of Upper Great Lakes Anthropology. Edited by E. Johnson. Minnesota Historical Society. pages 157-171.

Norman County Heritage Commission and the Norman County Historical Society

1976 History of Norman County. Dallas, TX: Taylor Publishing Company.

Norman County Statehood Centennial Committee

1958 History of Norman County, Minnesota. Ada, MN.

O'Connell, Barbara

1981 Personal communication. Telephone conversations dated 23 and 30 October 1981 between O'Connell (Assistant Minnesota State Archaeologist) and Dahlberg (HASI staff person).

Ossenberg, N.

"Origins and Relationships of Woodland Peoples: The Evidence of Cranial Morphology." In: Aspects of Upper Great Lakes Anthropology. Edited by E. Johnson. Minnesota Historical Society. St. Paul, MN. pages 15-39.

Pettipas, Leo F.

1970 "Early Man in Manitoba." In: Ten Thousand Years: Archaeology in Manitoba. Edited by W. Hlady. Manitoba Archaeological Society.

Quimby, George

"The Old Copper Culture and the Copper Eskimos, an Hypothesis." In: Arctic Institute of North America, Technical Paper #11. Edited by John M. Campbell.

Reeves, Brian O.K.

"Cultural Dynamics in the Manitoba Grasslands, 1000 B.C. to A.D. 700. <u>In:</u> Ten Thousand Years: Archaeology in Manitoba. Edited by W. Hlady. Manitoba Archaeological Society.

Reid, R. and C.G. Gannon

1928 "Natural History Notes on the Journals of Alexander Henry."
North Dakota Historical Quarterly 2:168-200.

Robinson, Elwyn B.

1966 The History of North Dakota. Lincoln, NE:University of Nebraska Press.

Roetzel, Kathleen, and Michael Eigen

The Cultural Resources Investigation of the Wild Rice River-South Branch and Felton Ditch Flood Control Area, Clay and Norman Counties, Minnesota. Submitted to the U.S. Army Corps of Engineers, St. Paul District.

Schneider, Fred, Ph.D.

1981 Personal communication. Between Schneider (Professor of Anthropology, University of North Dakota, Grand Forks) and Dahlberg (HASI staff person).

- Schwartz, Geo. M. and Geo. A. Thiel
 - 1978 Minnesota Rocks and Waters: A Geological Story. Minneapolis, MN:University of Minnesota Press.

Schweigert, Kurt

- 1977 Historic Sites Cultural Inventory in the Devil's Lake Region, Central Project Areas, Garrison Diversion Unit, North Dakota. Submitted to the U.S. Bureau of Reclamation.
- Shay, C.T.
 - 1971 The Itasca Bison Kill Site. Minnesota Historical Society.
- Steinbring, Jack E.
 - "Evidence of Old Copper in the Northern Transitional Zone."

 In: Ten Thousand Years: Archaeology in Manitoba. Edited by
 W. Hlady. Manitoba Archaeological Society.

Streiff, Jan E.

- 1972 Roster of Excavated Prehistoric Sites in Minnesota to 1972.
 Minnesota Historical Society. St. Paul, MN.
- An Archaeological Survey of the Twin Valley Flood Control Project for the U.S. Army Corps of Engineers, St. Paul District. Unpublished manuscript on file with the Minnesota State Historic Preservation Office and the U.S. Army Corps of Engineers, St. Paul District.

Syms, Leigh

- 1970 The McKean Complex in Manitoba. <u>In:</u> Ten Thousand Years: Archaeology in Manitoba. Edited by W. Hlady. Manitoba Archaeological Society.
- "Cultural Ecology and Ecological Dynamics of the Ceramic Period in Southwestern Manitoba." Plains Anthropologist, Memoir 12 22(76), Part 2.
- "The Devils Lake-Sourisford Burial Complex on the Northeastern Plains." Plains Anthropologist 24(86):283-308.

Thwaites, Reuben Gold

- 1904-1905 Original Journals of the Lewis and Clark Expedition, 1804-1806. New York, NY:Dodd, Mead and Company.
- Trygg, J. William
 - 1967 Composite Map of the United States Land Surveyors' Original Plats and Field Notes. Sheet 20. Minnesota Series.
- Turner, John and C.K. Semling
 - The History of Clay and Norman Counties, Minnesota, Volume II. Indianapolis, IN:B.F. Bowen and Company.

Upham, Warren

1969 Minnesota Geographic Names - Their Origin and Historic Significance. Minnesota Historical Society Report Edition.

Vehik, Rain

1979 An Archaeological Survey of Selected Portions of the Lower and Middle Sheyenne River Basin in North Dakota. U.S. Army Corps of Engineers, St. Paul District. St. Paul, MN.

Warren, W.

1957 History of the Ojibway Nation. Minneapolis, MN: Ross and Haines, Inc.

Waters, Thomas F.

1977 The Streams and Rivers of Minnesota. Minneapolis, MN: University of Minnesota Press.

Wedel, Waldo R.

1961 Prehistoric Man on the Great Plains. Norman, OK:University of Oklahoma Press.

Wheeler, Richard P.

The Stutsman Focus: An Aboriginal Culture Complex in the Jamestown Reservoir Area, North Dakota. River Basin Surveys Papers #30, Bureau of American Ethnology Bulletin 185. Smithsonian Institute. From: Michlovic 1981. The Red River Valley in the Prehistory of the Northern Plains. Paper presented at the 39th Plains Conference. Bismarck, ND.

Wilford, Lloyd A.

Norman County Memo. Unpublished manuscript on file with the University of Minnesota Anthropology Laboratory and with the Minnesota State Historic Preservation Office. 20 August 1945.

Williams, Mary Ann Barnes

1961 Origins of North Dakota Place Names. Bismarck, ND:Bismarck Tribune.

Winchell, N.H.

1911 Aborigines of Minnesota.

Wood, W. Raymond

1971 Biesterfeldt: A Post-Contact Coalescent Site on the Northern Plains. Smithsonian Contribution to Anthropology, #15. Washington, D.C.

Woolworth, Alan R.

1970 Ethnohistorical Report on the Indian Occupancy of Royce Areas Nos. 496, 497, and 538. Manuscript prepared for presentation before Indian Claims Commission.

Woolworth, Nancy L.

"Gingras, St. Joseph and the Metis in the Northern Red River Valley: 1843-1873." North Dakota Hisotry 42 (Fall).

APPENDIX I

Contract DACW37-81-M-2476 Scope of Work

CKED SOX	ORDER FOR SUPPLIES OF	N SERVICES	RETU		OF THIS QUOTE BY					PAGE 1 OF
	RS_	14	(THIS	IS NOT AN ORDER. See D						S. CERTIFIED FOR A
	7 -81-4-2476	2. DELIVERY ORDER NO.		3. DATE OF ORDER		STONPU			_	DMS REG I
HEBUED BY:	1-81-M-X4/0	CODE	12.	81 AUG 28		ED-E	K ~ K ~	102	<u> </u>	8. DELIVERY FOR
107.0	ariosis es t	1 1 7 7 F		The second second			13			■ DEST
	Buch Buchling			A Commence of	1.0		: -			DOTHER
1125	3.3. P.O. & CLS	43. 4 4.27		- Eleks 19 - Pendir in Aprilia k 	ده مه ولا دست	المصافحة المتا	a inter	د مناب	~	(See Schedule if a
£ ?	Calling that him will	1.3	- 1	i di kantan i di Kalaman kana ing		.	:			,
CONTRACTOR		CODE		FACILITY CODE		10. DELLY		POINT B	Y:	11. CHECK IF
		<u> </u>		<u> </u>		PER	SCO	PE (OF	SMALL BUSH
	HISTORICA	L & ARCHAEOL	LOGICA	L T		WO	RK			MINORITY BU
NAME AN	SURVEYS,	INC.				12.DISCO	UNT TERM	MS		
ADDRESS		NEBROOK CT.				NET				
	GRAND FOR	KS, ND 5820	01	_		13.MAIL				
		ES C. DAHLBI				AS	511		HI I.C	. 6.1 . 15
4. SHIPTOL	CORPS OF ENGL	CODE		PAYMENT WILL BE MADE BY		CODE				
`				sied invoigt	5 49	DUPL!	UM	: 19	:	MARKAL
121	. USPO & CUS	TOM HOUSE		e fail da.						PACKAGES A PAPERS WIT
ST.	PAUL, MN 5	5101		risi de la lace					e perce	CONTRACT (
	, . ,			Er. PAIL 1. VS	of the	ATT	1: N) زرن	FE	1
DELIVERY	This delivery order is	s subject to instructions conta no of above numbered contrac	ined on this si	de of form only and is baue	d on anothe	Coverage	ent offenc	y or la	accordance will	h and subject
35	 			mont Will Le Ti					~	
PURCHASE	' I X I	ITTEN QUOTE		6 24		_			-	for U.S. purchases,
	 1	f Perchase Order on DD Form	1155r (EXCE							
	apecial provisions				•	•	sted. Th	is purch	ase is negotial	ted under authority o
A.A. / 10	(x3) or an opecified in the ach		-			r K e r				
I checked	Additional General Provision	is anniv: Supplier shall such ".	Acceptance" on	DO From 1155 and million		e	opies.			
ACCOUNTING R11	810017 892-30-7ZAO	CALUSE		ed Form [1337 and return						
ACCOUNTING R11	SAND APPROPRIATION DATA/LOS 810017	CALUSE			20. QL	JANTITY IDERED/	21. UNIT	22.	UNIT PRICE	23.
ACCOUNTING R11 BE-	CULTURAL RE	SCOM SCHEDULE OF SUPPLIES SOURCES INVE	ESTIGATION HAL	TION OF THE	20. OR ACC	JANTITY DERED/	1 1		LANT PRICE	AMO
R11 BE-	CULTURAL REFLOOD CONTRACTOR OUTLINED IN	SCOM SCHEDULE OF SUPPLIES SOURCES INVENTED A PROJECT /	ESTIGA AT HAL: RFORM SCO	TION OF THE STAD, HN. THE SERVICE: PE OF WORK.	20. OI OR ACC	JANTITY DERECTO	JOB		25.101AL	AMOUP
R11 BE-	CULTURAL REFLOOD CONTRACTOR OUTLINED IN	SCOM SCHEDULE OF SUPPLIES SOURCES INVENTED A PROJECT /	ESTIGA AT HAL: RFORM SCO	TION OF THE STAD, HIN. THE SERVICES PE OF WORK.	20. Qu on	JANTITY DEREDY-CEPTED -	JOE		25. 10 1AL 29. DIFFER.	AMOUR
R11 BE- . ITEM NO. 1	CULTURAL REFLOOD BONTR THE CONTRAC OUTLINED IN ORIGINAL ADDRESS OF THE MARKET STATES OF THE CONTRAC OUTLINED IN ORIGINAL ADDRESS OF THE MARKET STATES OF THE CONTRACT OF THE CONTRACT OUTLINED IN ORIGINAL CONTRACT OF THE MARKET STATES OF THE CONTRACT OUTLINED IN ORIGINAL CONTRACT OF THE MARKET OF THE CONTRACT OUTLINED IN ORIGINAL CONTRACT OF THE MARKET OUTLINED IN ORIGINAL CONTRACT OUTLINED IN	SCOM SCHEDULE OF SUPPLIES SOURCES INVENTED A PROJECT /	ESTIGA AT HAL: RFORM SCO	TION OF THE STAD, HIN. THE SERVICES PE OF WORK.	20. Qu on	JANTITY DEREDY-CEPTED -	JOE		25. TOTAL 25. OFFERENCES	AMOUN
ACCOUNTING R11 BE- A. STEM NO. 1	COLUMN 20 HAS BEEN:	SCOM SCHEDULE OF SUPPLIES SOURCES INVENTED ATTACHE TOR WILL PER THE ATTACHE SV: R.	ESTIGATION AND SECOND	TION OF THE STAD, HN. THE SERVICES PE OF WORK.	20. OI OR ACC	JANTITY DEREDY-CEPTED -	JOE		25. 10 1AL 29. DIFFER.	AMOUN
R11 BE- . ITEM NO. 1	COLUMN 20 HAS BEEN:	SCOM SCHEDULE OF SUPPLIES SOURCES INVENTED A TOR WILL PER THE ATTACHE	ESTIGATION AND SECOND	TION OF THE STAD, HN. THE SERVICE: PE OF WORK.	20. OL OR	JANTITY DERECT- DEPTED 1 1 SUG 3 SUG 3 SUB OFFICE OFF	JOE		25. TO TAL 29. DIFFER. ENCES 30. HIITIALS	1,485
ACCOUNTING R11 BE- A. STEM NO. 1	COLUMN 20 HAS BEEN:	SCOM SCHEDULE OF SUPPLIES SOURCES INVENTED AND THE ATTACHE ACCEPTED AND CONFORMS TO	ESTIGATION AND SECOND	TION OF THE STAD, HIN. THE SERVICE: PE OF WORK.	20. Qu on	JANTITY DERECT- DEPTED 1 1 SUG 3 SUG 3 SUB OFFICE OFF	JOE		25. TO TAL 29. DIFFER. ENCES 30. HIITIALS	1,485
ACCOUNTING R11 BE- A. STEM NO. 1	COLUMN 20 HAS BEEN:	SCOM SCHEDULE OF SUPPLIES SOURCES INVENTED AND THE ATTACHE ACCEPTED AND CONFORMS TO	ESTIGATION AND SECOND	TION OF THE STAD, HIN. THE SERVICE: PE OF WORK.	20. OL OR	JANTITY DERECT- DEPTED 1 1 SUG 3 SUG 3 SUB OFFICE OFF	JOE		25. TO TAL 29. DIFFER. ENCES 30. INITIALS 33. AMOUNT	1,485
ACCOUNTING R11 BE- TEM NO. THE QUARTITY IN PROPERTY IN PATE DATE	COLUMN 20 HAS BEEN:	SCOM SCHEDULE OF SUPPLIES SOURCES INVENTED AND PROJECT AND THE ATTACHE THE ATTACHE SOURCES INVENTED AND PROJECT AND PROJECT AND PROJECT AND PROJECT AND PROPERTY AS NOTED	ESTIGATED AME	TION OF THE STAD, HN. THE SERVICE: PE OF WORK. CONT. PARTIAL FINAL 31. PAYMENT	20. OL OR	JANTITY DERECT- DEPTED 1 1 SUG 3 SUG 3 SUB OFFICE OFF	JOE		25. TO TAL 29. DIFFER. ENCES 30. HIITIALS	1,485
ACCOUNTING R11 BE- TEM NO. THE QUARTITY IN PROPERTY IN PATE DATE	COLUMN 20 HAS BEEN:	SCOM SCHEDULE OF SUPPLIES SOURCES INVENTED AND PROJECT AND THE ATTACHE THE ATTACHE SOURCES INVENTED AND PROJECT AND PROJECT AND PROJECT AND PROJECT AND PROPERTY AS NOTED	ESTIGATED AME	TION OF THE STAD, FIN. THE SERVICE: PE OF WORK. OF THE SERVICE: PE OF WORK. OF THE SERVICE: PE OF WORK.	20. OL OR	JANTITY DERECT- DEPTED 1 1 SUG 3 SUG 3 SUB OFFICE OFF	JOE		25. TO TAL 29. DIFFER- ENCES 30. HIITIALS 33. AMOUNT	1,485
ACCOUNTING R11 BE- TEM NO. THE QUARTITY IN PROPERTY IN PATE DATE	COLUMN 20 HAS BEEN:	SCOM SCHEDULE OF SUPPLIES SOURCES INVENTED AND PROJECT AND THE ATTACHE THE ATTACHE SOURCES INVENTED AND PROJECT AND PROJECT AND PROJECT AND PROJECT AND PROPERTY AS NOTED	ESTIGATED AME	TION OF THE STAD, FIN. THE SERVICE: PE OF WORK. PE OF WORK. PARTIAL FINAL FINAL PARTIAL PARTIAL PARTIAL	20. OL OR	JANTITY DERECT- DEPTED 1 1 SUG 3 SUG 3 SUB OFFICE OFF	JOE		25. TO TAL 29. DIFFER. ENCES 30. INITIALS 33. AMOUNT	1,485.
R11 BE- A. ITEM NO. ITEM NO. ITEM NO. ITEM NO. DATE DATE DATE DATE	COLLTURAL REFLOOD BONTR THE CONTRAC OUTLINED IN COLLTURAL REFLOOD BONTR THE CONTRAC OUTLINED IN COLLINED IN COLLINED IN COLLINE OF AUTHORISE OF BONTRE OF BONTR	SCOM SCHEDULE OF SUPPLIES SOURCES INVENTS SOURCES INVENTS SOURCES INVENTS SOURCES INVENTS TOR WILL PER THE ATTACHE AND TITLE OF CERTIFYING OFFICE THE SECOND OF CERTIFYING OFFICE THE SECOND O	ESTIGATE OF AME LATES OF AME C. L.H. THE CONTRACT ENTATIVE	TION OF THE STAD, FIN. THE SERVICE: PE OF WORK. PE OF WORK. DEPT CONTENTS PARTIAL FINAL PARTIAL PARTIAL FINAL FINAL	20. OIL OR OR OIL	JANTITY DERED - CEPTED - CEPTE	JOB		25. TOTAL 29. DIFFER- ENCES 30. INITIALS 33. AMOUNT 34. CHECK N	1,485.
R11 BE- A. ITEM NO. ITEM NO. ITEM NO. ITEM NO. DATE DATE DATE DATE	COLUMN 20 HAS BEEN: Description of Authoritists of Column 20 HAS BEEN: Description of Column 20 HAS BEEN:	SCOM SCHEDULE OF SUPPLIES SOURCES INVENTS SOURCES INVENTS SOURCES INVENTS SOURCES INVENTS TOR WILL PER THE ATTACHE AND TITLE OF CERTIFYING OFFICE THE SECOND OF CERTIFYING OFFICE THE SECOND O	ESTIGATE OF AME THE CONTRACT ENTATIVE	TION OF THE STAD, FIN. THE SERVICE: PE OF WORK. PE OF WORK. PARTIAL FINAL FINAL PARTIAL PARTIAL PARTIAL	20. OIL OR OR OIL	JANTITY DERECT- DEPTED 1 1 SUG 3 SUG 3 SUB OFFICE OFF	JOB		25. TO TAL 29. DIFFER- ENCES 30. HIITIALS 33. AMOUNT	1,485

ADDITIONAL GENERAL PROVISIONS (CONTINUED)
(For use with DD 1155 for the procurement of supplies and services when the amount of this contract does not exceed \$2,500)

Edition of 12 September 1980
Issued By: Department of the Army, Corps of Engineers

21. FAIR LABOR STANDARDS ACT AMENDMENT (1974 MAY)

(The following clause is applicable if this contract is for services)
Notwithstanding any other provisions of this contract, the minimum wage
payment shall be as specified by P.L. 93-259 or the service contract act wage
determination rate, if any, whichever is greater.

22. ALTERATIONS

The following alteration has been made.

5. DISPUTES. In accordance with the Contract Disputes Act of 1978, Clause 5, Disputes, DD Form 1155r, is deleted and the following is inserted therefor.

DISPUTES (1980 JUN)

- (a) This contract is subject to the Contract Disputes Act of 1978 (P.L. 95-563).
- (b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved in accordance with this clause.
 - (c) (i) As used herein, "claim" means a written demand or assertion by one of the parties seeking, as a matter of right, the payment of money, adjustment or interpretation of contract terms, or other relief, arising under or relating to this contract. However, a written demand by the contractor seeking the payment of money in excess of \$50,000 is not a claim until certified in accordance with (d) below.
 - (ii) A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim for the purposes of the Act. However, where such submission is subsequently disputed either as to liability or amount or not acted upon in a reasonable time, it may be converted to a claim pursuant to the Act by complying with the submission and certification requirements of this clause.
 - (iii) A claim by the contractor shall be made in writing and submitted to the contracting officer for decision. A claim by the Government against the contractor shall be subject to a decision by the Contracting Officer.
- (d) For contractor claims of more than \$50,000, the contractor shall submit with the claim a certification that the claim is made in good faith; the supporting data are accurate and complete to the best of the contractor's knowledge and belief; and the amount requested accurately reflects the contract adjustment for which the contractor believes the Government is liable. The certification shall be executed by the contractor if an individual. When the contractor is not an individual, the certification shall be executed by a senior company official in charge at the contractor's plant or location involved, or by an officer or general partner of the contractor having over-all responsibility for the conduct of the contractor's affairs.
- (e) For contractor claims of \$50,000 or less, the Contracting Officer must, if requested in writing by the contractor, render a decision within 60 days of the request. For contractor certified claims in excess of \$50,000 the

Contracting Officer must decide the claim within 60 days or notify the contractor of the date when the decision will be made.

- (f) The Contracting Officer's decision shall be final unless the contractor appeals or files a suit as provided in the Act.
- (g) Incerest on the amount found due on a contractor claim shall be paid from the date the contracting officer receives the claim, or from the date payment otherwise would be due, if such date is later, until the date of payment.
- (h) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal or action arising under the contract, and comply with any decision of the Contracting Officer. (DAR 7-103.12(a))

SCOPE OF WORK CULTURAL RESOURCES INVESTIGATION FOR A FLOOD CONTROL PROJECT AT HALSTAD, MINNESOTA

1.00 INTRODUCTION

- 1.01 The Contractor will undertake a cultural resources reconnaissance survey of the flood control project at Halstad, Minnesota.
- 1.02 This cultural resources inventory is being done in partial fulfillment of the obligations of the St. Paul District regarding cultural resources, as set forth in the Historic Preservation Act of 1966 (Public Law (P.L.) 89-665), the National Environmental Policy Act of 1969 (P.L. 91-190), Executive Order (E.O) 11593 for the Protection and Enhancement of the Cultural Environment (Federal Register, 13 May 1971), the Archaeological Conservation Act of 1974 (P.L. 93-291), the Advisory Council on Historic Preservation "Regulations for the Protection of Historic and Cultural Properties" (36 CFR Part 800), the Department of the Interior guidelines concerning cultural resources (36 CFR Part 60), and Corps of Engineers regulations (ER 1105-2-460) "Identification and Administration of Cultural Resources" (Federal Register, 3 April 1978).
- 1.03 The above laws establish the importance of Federal leadership, through the various responsible agencies, in locating and preserving cultural resources within project areas. Specific steps to comply with these laws, particularly as directed in P.L. 93-291 and E.O. 11593, are being taken by the Corps "...to assure that Federal plans and programs contribute to the preservation and enhancement of non-federally owned sites, structures, and objects of historical, architectural, or archaeological significance." A part of that responsibility is to locate, inventory, and nominate to the Secretary of the Interior all such sites in the project area that appear to qualify for listing on the National Register of Historic Places.
- 1.04 The Executive Order further directs Federal agencies "...to assure that any federally owned property that might qualify for nomination is not inadvertently transferred, sold, demolished or substantially altered." In addition, the Corps is directed to administer its policies, plans and programs in such a way that federally and non-federally owned sites, structures, and objects of historical, architectural, or archaeological significance are preserved and maintained for the inspiration and benefit of the people.
- 1.05 This cultural resources investigation will serve several purposes. The report will be a planning tool to aid the Corps in meeting its obligations to preserve and protect our cultural heritage. It will be a comprehensive, scholarly document that not only partially fulfills federally mandated legal requirements but also serves as a scientific reference for future professional



studies. It will identify sites which may require additional investigations and which may have potential for public-use development. Therefore, the report must be analytical, not just descriptive.

2.00 PROJECT DESCRIPTION

- 2.01 Halstad is located on the western edge of Norman County, Minnesota, about 36 miles north of Moorhead, Minnesota, and about one-half mile east of the Red River of the North at river mile 375.2. The Red River forms the border between Minnesota and North Dakota and drains an area of approximately 21,800 square miles at this point.
- 2.02 Agriculture forms the base of the area economy. The main crops are wheat and sugar beets, with hay, corn, and other crops providing some diversity. Although the flat terrain of the surrounding countryside is excellent farmland, it also creates serious flood problems from the Red River of the North.
- 2.03 Emergency flood protection works were constructed in Halstad under the authority of P.L. 84-99 during the flood emergencies of 1969 and 1975. This work consisted of temporary levees constructed along the west and portions of the north and south sides of the city. The approximately 11,000-foot-long levee is generally 2 to 6 feet high in sections near the west side of the city and up to 25 feet high near the sewage plant. Local interests have responsibility for removing levees constructed under P.L. 84-99. However, they chose to leave most of the emergency levee in place. The sections of the levee constructed over Trunk Highways 75 and 200, the Burlington Northern railroad tracks, and several city streets have been removed. The remaining levee has been well maintained by the city and appears to be in generally good condition.
- 2.04 Flooding along the Red River of the North is usually caused by spring snowmelt and rainfall. However, flooding has also occurred later in the summer after extended periods of rainfall, as evidenced by the June 1962 and July 1975 floods. Flood stage at Halstad is 850.7 feet above mean sea level, which corresponds to a flow of about 14,800 cubic feet per second. This stage was exceeded in 1897, 1943, 1947, 1948, 1950, 1952, 1962 (twice), 1965, 1966, 1969, 1972, 1974, 1975 (twice), 1978, and 1979, for a total of 17 times. All of these floods would be potentially damaging under existing conditions.
- 2.05 Several structural and non-structural plans are presently under consideration, including an evacuation/relocation plan, a levee plan, and a combination of these plans. The evacuation/relocation plan would require the relocation of a large number of commercial, private, and public facilities and would be very costly. The levee plan would generally follow the alignment of the existing emergency levee. The elevation of the existing emergency levee corresponds to about the 100-year flood frequency, but without any freeboard. Variations of the levee plan will be developed for several flood elevations and will include an interior drainage system. The combination plan would consist of the levee plan and would also consider the northwest corner of the city where a loop in the lever about 2,900 feet long protects the sewage treatment plant and a farmstead. The combination plan will examine non-structural measures for addressing the flood threat to the sewage plant and farmstead.

3.00 DEFINITIONS

- 3.01 For the purpose of this study, the cultural resources investigation will include a literature and records search and review, and a Phase I on-the-ground reconnaissance level survey. Phase II testing will not be conducted at this time.
- 3.02 "Cultural resources" are defined to include any building, site, district, structure, object, data, or other material relating to the history, architecture, archaeology, or culture of an area.
- 3.03 "Literature and records search" is defined as a search for and examination of written reports, books, articles, files, records, etc., published and unpublished (found in private, local, State, and Federal depositories), which are pertinent to the cultural resources investigation to be carried out for a particular project. The purposes of the literature and records search are: to familiarize the Contractor with the culture history of the study area and past investigations which have been carried out in the area; to document the location and condition of known sites which may exist within the project area, the extent of past work undertaken at the site, and any other information which may be relevant in assessing the significance of the site; and to provide this information in a summarized form to the agency requesting the search. Although existing data may be extensive, the literature and records search should be as comprehensive as possible in providing a usable body of data for the purposes outlined above.
- 3.04 "Literature and records review" is defined as the review and evaluation of the pertinent literature and records examined under section 3.03. The purpose of the literature and records review is to provide the sponsoring agency with the Contractor's professional opinion as to the quality, nature, and extent of the sources identified in the literature and records search (see section 5.11).
- 3.05 "Phase I cultural resources survey" is defined as an intensive, on-the-ground survey and testing of an area in order to determine the number and extent of the archaeological, historic, and architectural resources present and their relationship to all the project alternatives and features. A Phase I cultural resources survey will result in data adequate to assess the general nature of all sites present; a recommendation for additional testing of those resources which, in the professional opinion of the Contractor, may provide important cultural and scientific information; and detailed time and cost estimates for Phase II testing.
- 3.06 "Phase II testing" is defined as the intensive testing of those sites which may provide important cultural and scientific information. Phase II testing will result in data adequate to determine the eligibility of the resources for inclusion on the National Register of Historic Places, a plan for the satisfactory mitigation of eligible sites which will be directly or indirectly impacted, and detailed time and cost estimates for mitigation. Phase II testing will not be conducted under this contract.

4.00 SURVEY SPECIFICATIONS

- 4.01 The literature and records search and review conducted by the Contractor will encompass the specific project area as well as a larger or regional archeological and historic study area. The scope of the search and review shall be large enough to provide the sponsor with an overall perspective on the area's cultural resources as well as project specific information.
- 4.02 Project features that will be field surveyed under this contract include upgrading and widening of the existing emergency levee, the new proposed levee alignment, holding ponds, and ditch and pipe alignments.
- 4.03 The existing emergency levee (circa 200 feet wide) will be upgraded and widened to approximately 245 feet wide. The area to be surveyed is 50 feet either side of the levee beginning at the toe of the levee. The area will be 100 percent surveyed for the entire length of the levee. When the levee was originally constructed, the top soil underneath (and possibly beside) the levee may have been removed. The existing levee is delineated in yellow on the enclosed map.
- 4.04 The proposed new levee will be approximately 5,700 feet long, 3 to 4 feet high, and 80 feet wide. In most areas, the proposed alignment parallels existing roads. A 200 foot wide area will be 100 percent surveyed as shown in pink on the enclosed map.
- 4.05 A cemetery (see enclosed map) is located at the junction of sections 19, 20, 29 and 30. The proposed levee may go on either side of the road. In this area a 200 foot wide area shall be 100 percent surveyed on both sides of the existing highway, beginning at the edge of the existing right-of-way. A determination of the impact of both levee alignments on the cemetery shall be included in the technical report.
- 4.06 Just north-northeast of the oxbow is an approximate 5-acre zone (green on the enclosed map) through which the loop portion of the existing levee may be realigned. This zone shall be 100 percent surveyed.
- 4.07 The three proposed holding ponds for the interior drainage system are delineated by the blue blocks on the enclosed map. The three areas shall be 100 percent surveyed. Construction plans may include some excavation and a berm surrounding the ponds. Presently some of the area is low and possibly marshy.
- 4.08 Also associated with the interior drainage system is a ditch and pipe which would lead into one of the holding ponds. The ditch and pipe alignment are also designated on the enclosed map in blue. A 50-foot area, the length of the alignment, shall be 100 percent surveyed.

5.00 PERFORMANCE SPECIFICATIONS

- 5.01 The Contractor will utilize a systematic, interdisciplinary approach in conducting the study. The Contractor will provide specialized knowledge and skills during the course of the study to include expertise in archeology, history, architectural history and other social and natural sciences as required.
- 5.02 The extent and character of the work to be accomplished by the Contractor will be subject to the general supervision, direction, control, review and approval of the Contracting Officer.
- 5.03 Techniques and methodologies that the Contractor uses during the investigation shall be representative of the current state of knowledge for their respective disciplines.
- 5.04 The Contractor shall keep standard records which shall include, but not be limited to, field notebooks, site survey forms, field maps, and photographs.
- 5.05 The tested areas will be returned as closely as practical to presurvey conditions by the Contractor.
- 5.06 The recommended professional treatment of recovered materials is curation and storage of the artifacts at an institution that can properly insure their preservation and that will make them available for research and public view. If such materials are not in Federal ownership, the consent of the owner must be obtained, in accordance with applicable law, concerning the disposition of the materials after completion of the report. The Contractor will be responsible for making curatorial arrangements for any collections which are obtained. Such arrangements must be coordinated with the appropriate officials of Minnesota and approved by the Contracting Officer.
- 5.07 When sites are not wholly contained within the right-of-way, the Contractor shall survey an area outside the right-of-way limits large enough to include the entire site within the survey area. This procedure shall be done in an effort to delineate site boundaries and to determine the degree to which the site will be impacted.
- 5.08 The Contractor shall provide all materials and equipment as may be necessary to expeditiously perform those services required of the study.
- 5.09 Should it become necessary in the performance of the work and services, the Contractor shall, at no cost to the Government, secure the rights of ingress and egress on properties not owned or controlled by the Government. The Contractor shall secure the consent of the owner, his representative, or agent, in writing prior to effecting entry on such property. If requested, a letter of introduction, signed by the District Engineer, can be provided to explain the project purposes and request the cooperation of landowners. Where a landowner denies permission for survey, the Contractor shall immediately notify the Contracting Officer and shall describe the extent of the property to be excluded from the survey.

Literature And Records Search And Review (See sections 3.03 and 3.04 for derinitions)

- 5.10 The Contractor will obtain information and data for the literature and records search from, but will not be limited to, the following sources:
- a. Published and unpublished reports and documents such as books, journals, theses, dissertations, manuscripts, newspapers, surveyor's maps and notes, early atlases, missionary records, and other private, city, State or Federal documents.
- b. Site files and other information held at the Minnesota and North Dakota State Historical Societies Libraries, Archives, and Archaeology Department; the State Archaeologist's Office; the University of Minnesota and North Dakota Departments of Anthropology and libraries; and materials available from the Norman County Historical Society and other local historical societies.
- c. The Contractor will obtain from the Minnesota State Historic Preservation Office information regarding any cultural resources in the project area that have been nominated or are being considered for nomination to the National Register of Historic Places, and will report the results in the contract report.
- d. Consultation with other professionals familiar with cultural resources in the area.
 - e. Consultations with amateur archeologists, historians, and individuals concerned with local archeology and history in order to locate sites and to identify and define local interests and resources perceived to be locally significant.
 - 5.11 A review and evaluation of previous archeological and historical studies of the region, including the date, extent, and adequacy of the past work as it reflects on the interpretation of what has been done in the area, should be undertaken and summarized in the report.
 - 5.12 The literature and records search shall include a listing of all sites (historic and prehistoric) identified during the course of the study and an evaluation of the direct and indirect impact upon them of all the proposed project alternatives and features.

Phase I Survey

5.13 The on-the-ground examination will involve an intensive survey and subsurface informal testing of the area in order to determine the total number and examination without the control of cultural resources present. This includes standing architectural vitructures as well as historic and prehistoric archeological sites.

- 5.14 An attempt will be made to locate all resources previously recorded that are located in the project area as described in the preceeding sections and to report their condition.
- 5.15 The survey shall include surface inspection in areas where surface visibility permits adequate recovery of cultural materials and subsurface testing where surface visibility is limited. Subsurface investigation will include shovel testing, coring, soil borings, or cut bank profiling, where necessary and appropriate.
- 5.16 The recommended grid or transect interval is 15 meters (50 feet). However, this interval may vary depending upon field conditions. If the recommended interval is not used, justification should be presented for selection of an alternate interval. All subsurface tests will be screened through 1/4-inch mesh.

6.00 GENERAL REPORT REQUIREMENTS

- 6.01 The Contractor will submit the following types of reports, which are described in this section and in section 9.00: field report, field notes, draft contract report, final contract report, and a popular report.
- 6.02 The Contractor's technical report shall include, but shall not be limited to, the following sections.
- a. <u>Title Page</u>: The title page shall provide the following information: the type of investigation undertaken; the cultural resources which were assessed (archeological, historical, and architectural); the project name and location (county and State); the date of the report; the Contractor's name; the contract number; the name of the author(s) and/or Principal Investigator; the signature of the Principal Investigator; and the agency for which the report is being prepared.
- b. Abstract: An abstract of findings, conclusions, and recommendations. This should not be an annotation.
- c. Management Summary: This section will include a concise summary of the study, which will contain all essential data for using the document in the Corps of Engineers management of the project. This information will minimally include: why the work was undertaken and who the sponsor is, a brief summary of the scope of work and budget, summary of the study (field work; lab analysis; literature and records search and review, including the National Register of Historic Places, dates checked, and results), study limitations, study results, significance, recommendations and the repository of all pertinent records and artifacts.
 - d. Table of Contents
 - e. List of Figures
 - f. List of Plates
- g. Introduction: This section shall identify the sponsor (Corps of Engineers) and the sponsor's reason for the study; an overview of the sponsor's project and the alternatives, with the alternatives located on USGS quad maps; provide an overview of the archeological/historical study to be undertaken; define the location and boundaries of the study area (with regional and areaspecific maps); define the study area within its cultural, regional, and environmental context; reference the scope of work; identify the institute that did the work, the number of people involved in the study, the number of persondays/hours utilized during the study; identify the dates when the various types of work were completed; identify the repository of records and artifacts; and provide a brief overview or outline of how the study report will proceed and an overview of the major goals that the study/study report will accomplish.

- h. Previous Archeological and Historical Studies: This section shall provide a summary and evaluation of previous archeological and historical studies of the project area and region, including the researchers, date, extent, adequacy of the past work, study results, and cultural/behavioral inferences derived from the research.
- i. Environmental Background: This section shall include a description of the study area and regional environment, including the following categories: geology, vegetation, fauma, climate, topography, physiography, and soils, with reference to prehistoric, historic, ethnographic, and contemporary periods. Any information available on the relationship of the environmental setting to the area's prehistory and history shall be included. This section shall be of a length commensurate with other report sections.
- j. Regional Prehistory and History: This section shall discuss regional cultural developments, spatially and chronologically; environmental adaptations; subsistence, resource procurement, and settlement patterns; site/population density and size; and any other pertinent information on the prehistory, proto-history, and history of the project area and region.
- k. Theoretical and Methodological Overview: This section shall include a description or statement of the goals of the Corps of Engineers and the study researcher, the theoretical and methodological orientation of the study, and the research strategies that were applied in achieving the stated goals.
- 1. Literature and Records Search and Review: This section shall detail the methodology and sources used for the literature and records search and review as well as a description and evaluation of all information and data recovered. For each reference discussed, the author, date and page numbers will be cited. Bibliographic information shall also be included at the end of the report. (See sections 3.03, 3.04, 5.10, 5.11 and 5.12.)
- m. Field Methods: This section will describe specific archeological and historical activities that were undertaken to achieve the stated theoretical and methodological goals. The section shall include all field methods, techniques, strategies, and rationale or justification for specific methods or decisions. The description of the field methods shall minimally include: a description of the areas surveyed, survey conditions, topographic/physiographic features, vegetation conditions, soil types, stratigraphy, survey limitations, survey testing results with all appropriate testing forms to be included as an appendix (e.g., shovel tests, coring, cut bank profiles, etc.), degree of surface visibility, whether or not the survey resulted in the location of any cultural resources, the methods used to survey the area (pedestrian reconnaissance, subsurface test, etc.), the rationale for eliminating uninvestigated areas, the estimated size of the investigated sample and its relationship to the sample universe (e.g., 100 acres were surveyed, representing 15 percent of the project impact area), and the grid or transect interval used. Testing methods shall include descriptions of test units (size, intervals, stratigraphy, depth) and the rationale behind their placement.

- n. Analysis: This section will describe and provide the rationale for the specific analytic methods and techniques used, and describe and discuss the qualitative and quantitative manipulation of the data. Limitations or problems with the analysis based on the data collection results will also be discussed. This section shall also contain references to accession numbers used for all collections, photographs, and field notes obtained during the study, and the location where they are permanently housed.
- Investigation Results: This section will describe all the archeological and historic resources encountered during the study, and any other data pertinent to a complete understanding of the resources within the study area. This section shall include enough empirical data that the study results can be independently assessed. The description of the data shall minimally include: a description of the site; amounts and type of material remains recovered; relation of the site or sites to physiographic features, vegetation and soil types, project alternatives, and direct and indirect impact areas; analysis of the site and data (e.g., site type, cultural historical components and information, cultural/behavioral inferences or patterns); site condition; and location and size information (elevation, complete quad map source, legal description, address if appropriate, and site size, density, depth, and extent). The information shall be presented in a manner that can be used easily and efficiently by the Corps of Engineers. This site information shall be presented with each site discussed on a separate page/pages and the site location indicated on a USGS map. If a site location has not been field-verified, the Contractor must indicate the approximate area on the map and indicate that it has not been verified, or give an explanation why the site cannot be located on a map. An example of this site description format follows:

Site Number and Name

Complete Legal Description: Township, Range, Section, County or Address, if appropriate. Indicate if the site has been field-verified or not, when and by whom.

Complete USGS Quadrangle Reference: Quad name, Quad size, all Quad dates.

Report Figure/Map/Plate Reference

Accession Numbers

Site Type, Site Reports, Investigations of Dates

Cultural Affiliation (with dates or date estimates)

Environmental Descriptions: Briefly, to include topography, physiography, soils, and vegetation.

Site Description

Present Site Condition: Disturbed, undisturbed, vegetation, soils, and surface material.

<u>Site Significance</u>: As reported by others and the Contractor's evaluation, including an evaluation of previous conclusions.

Project Impacts: Evaluate the direct and indirect impacts of the project upon the site.

Recommendations: Management recommendations, future archeological/historic work recommendations.

Remarks: For comments with no other category.

Pertinent Bibliographic References

A paragraph before the site descriptions should indicate that, if no information is available for a specific category, this category will not be included in the listing.

The location of all sites and other features discussed in the text will be shown on a legibly photocopied USGS map and will be bound into the report. Maps shall also be included showing the relationship of sites to the project areas which were surveyed. In addition, the project map will show those areas that have been eliminated from the survey due to unacceptable survey conditions. Maps should also show the type of survey method employed for each area surveyed (for example, pedestrian walkover, shovel tests). All maps will be labeled with a caption/description, a north arrow, a scale bar, township, range, map size, and dates, and the map source (e.g., the USGS quad name or published source) and will have proper margins. All sites will be recorded on the appropriate State site forms. Inventoried sites shall include a site number. Official site designations assigned by an appropriate State agency are preferred. However, if temporary site numbers will be used in either the draft or final reports, they shall be substantially different from the official site designations to avoid confusion or duplication of site numbers. Known sites shall have their State site forms updated as necessary.

p. Evaluation and Conclusions: This section shall evaluate and formulate conclusions concerning site/sites location, density, size, condition, distribution, and significance in relation to the local and regional archeology and history; and in relation to the project alternatives and features; and shall also discuss the potential and goals for future research. The section shall also discust reliability of the analysis or other pertinent data recovered (e.g., site locations, types, distribution, etc.); relate results of the study and analysis to the stated study goals; identify changes, if any in the research goals; synthesize and compare the results of the analysis and study; integrate ancillary data; and identify and discuss cultural/behavioral patterns and processes that are inferred from the study and analysis results.

- q. Recommendations: This section shall discuss the direct and indirect impacts of all the project alternatives and features on the area's cultural resources with specific management recommendations on all previously recorded and newly discovered sites; discuss the significance of sites to the extent permitted by the study level in relation to the research goals established in the study; make recommendations on the potential eligibility of the sites to the National Register of Historic Places; recommend future intensive level research priorities, needs; and make suggestions with regard to the Corps of Engineers planning goals and project alternatives. These recommendations shall include a time and cost estimate. If it is the Contractor's assessment that no significance resources exist in the project area, the methods of investigation and reasoning which support that conclusion will be presented. If certain areas are not accessible, recommendations will be made for future consideration. Any evidence of cultural resources or materials which have been previously disturbed or destroyed will be presented and explained.
- r. <u>References</u>: This section shall provide standard bibliographic references (American Antiquity format) for every publication cited in the report. References not cited in the report will be listed in a separate "Additional deferences" section.
 - s. Appendix: This section shall include the Scope of Work; resumes of all personnel involved; all correspondence derived from the study; all State site forms; all testing and any other pertinent report information referenced in the text as being included in the appendix.
 - 6.03 Failure to fulfill these report requirements will result in the rejection of the report by the Contracting Officer.

7.00 FORMAT SPECIFICATIONS

- 7.01 The Contractor shall submit to the Contracting Officer the photographic negatives for all black and white photographs which appear in the final report.
- 7.02 All text materials will be typed, single-spaced (the draft reports should be space-and-one-half or double-spaced), on good quality bond paper, 8.5 inches by 11.0 inches, with a 1.5-inch binding margin on the left, 1-inch margins on the top and right, and a 1.5-inch margin at the bottom, and will be printed on both sides of the paper.
- 7.03 Information will be presented in textual, tabular, and graphic forms, whichever are most appropriate, effective, or advantageous to communicate the necessary information.
- 7.04 All figures and maps must be clear, legible, self-explanatory, and of sufficiently high quality to be readily reproducible by standard xerographic equipment, and will have margins as defined above.
- 7.05 The final report cover letter shall include a budget of the project.
- 7.06 The draft and final reports will be divided into easily discernible chapters, with appropriate page separation and heading.
- 7.07 Negatives of all black and white photographs contained in the final report must be included so that copies for distribution can be made.

8.00 MATERIALS PROVIDED

- 8.01 The Contracting Officer will furnish the Contractor with the following materials:
- a. Access to any publications, records, maps, or photographs that are on file at the district headquarters.
- b. Two sets of USGS Quadrangle maps of the project area. One set will be used as field maps, and one set will be returned to the Corps of Engineers designating site numbers and locations, and areas surveyed and tested.
 - c. One set of project alternative maps.
- d. A letter of introduction signed by the St. Paul District Engineer explaining the objectives of the work and requesting cooperation from private landowners, if requested.



9.00 SUBMITTALS

- 9.01 The Contractor will submit reports according to the following schedules:
- a. Field Report: The original and one copy of a field report will be submitted after completion of the field work. The field report will summarize the work, project/field limitations, methodology used, time utilized, and survey results.
- b. Project Field Notes: One legible copy of all the project field notes will be submitted with the draft contract report.
- c. <u>Draft Contract Report</u>: The original and 10 copies of the draft contract report will be submitted on or before 60 days after contract award. The draft contract report will be reviewed by the Corps of Engineers, the State Historic Preservation Officer, the State Archeologist, and the National Park Service. The draft contract report will be submitted according to the report and contract specifications outlined in this Scope of Work.
- d. <u>Final Contract Report</u>: The original and 15 copies of the final contract report will be submitted 30 days after the Corps of Engineers comments on the draft contract report are received by the Contractor. The final contract report will incorporate all the comments made on the draft contract report.
- e. <u>Popular Report</u>: A draft popular report will be submitted with the draft contract report, and will be reviewed by the Corps of Engineers. Fifteen copies of the final popular report will be submitted with the final contract report. The popular report shall be a condensed version of the contract report that would be of interest to the general public. The report shall provide an overview of the archeology, protohistory, and history of the project area and region; a brief review of the work conducted in the area and the reasons (both professional and managerial) why the work was conducted, and the results of the completed survey. Exact site locations will not be reported in the popular report.
- f. Site Forms: All completed State site forms will be submitted to the appropriate State agency.
- 9.02 Neither the Contractor nor his representative shall release any sketch, photograph, report, or other material of any nature obtained or prepared under the contract without specific written approval of the Contracting Officer prior to the acceptance of the final report by the Government. After the Contracting Officer has accepted the final report, distribution will not be restricted by either party except that data relating to the specific location of extant sites will be deleted in distributions to the public.

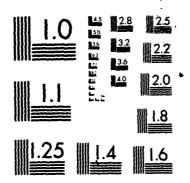
10.00 METHOD OF PAYMENT

10.01 Payment for all work performed under this contract will be made in a lump sum upon approval of the final report by the Contracting Officer.

APPENDIX II

Literature and Records Search and Review Materials

AD-A	171 825	ARC	HAEOLO HAEOLO DAHLO	OGICAL FOR	AND H	ISTOR	C CUL	TURAL	RESOUR	CES AND		2/	2
UNCL	ASSIFIE	D JÖ	DAHL	BERG E	T AL.	21 MA	82	PURK	3 110	F/G	5/6	NL	



MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS-1963-A

APPENDIX II Records and Literature Search and Review Materials
Dr. Norene Robers
Historical Research, Inc.
5406 Penn Avenue South
Minneapolis, MN 55419

7-8 October 1982

The following were consulted in the course of the records search:

The files of the Minnesota State Historic Preservation Office were checked for the entire Study Area (Minnesota Historical Society):

N1/2 Section 30, T145N, R48W SE1/4 SE1/4 Section 19, T145N, R48W S1/2 NW1/4 Section 19, T145N, R48W NE1/4 Section 25, T145N, R49W

These files consisted of the Archaeological files of the Minnesota Statewide Archaeological Survey (MSAS) and the Standing Structure files. The Archaeological files were searched for sites within the Study Area, checked against the County Highway maps (Norman County) for sites, and the Archaeological file of contract reports was checked for site specific information. We found no recorded sites in these sources of an archaeological or historic archaeological nature.

The Standing Structure files in the State Historic Preservation Office were searched. These files consist of the National Register of Historic Places files, by county and incorporated cities. The Norman County inventory files were checked for historic sites in the SHPO Inventory and for site leads (correspondence from locals, clippings, etc.). There are no recorded historic sites in the Study Area.

NOTE: We did not search the files of the University of Minnesota Anthropology Lab, because the SHPO archaeological files had already incorporated the former files into their system for this area.

The files at the Ft. Snelling branch of the Minnesota Historical Society were searched for the following:

- a) Abandoned townsite files
- b) Fur trading post files

NOTE: No recorded sites appeared in these files for the Study Area.

c) An attempt was made on 8 October 1981 to talk with and consult the files of Scott Anfinson (County Highway Archaeological Program) and Les Peterson (Federal Highway Archaeology). Both were out of the office in the field. Called Scott Anfinson on 9 October 1981 to ask if the Minnesota County Highway and Federal Trunk Highway programs

Records Search, page 2

have any recorded archaeological sites not on file with the Minnesota SHPO (MSAS and Standing Structure survey). He said they have nothing, but suggested contacting Mike Michlovic, who has been doing a major dig and work in the Halstad area all summer. Michlovic, according to Scott, has found an archaic site and is doing deep testing.

Literature Search, page 3

normally have very little to no site information in the MN county societies, but this is a way to make sure. We have enclosed a stamped envelope with your address and asked them to respond to you directly.

v) Enclosed, the appropriate pages from:

Norman County Statehood Centennial Committee

1958 A Short History of Norman County. Ada, MN:Privately published.

- w) Elden Johnson (1964) article on the Archaic and Lake Agassiz, enclosed. Has a good map of sites Elden has found on the east side of the Red River. (From the Minnesota Archaeologist.)
- x) The following information on Norman County climate is taken from:

Borchert, Hohn R. and Neil C. Gustafson

1980 Atlas of Minnesota Resources and Settlement. Third edition. Center for Urban and Regional Affairs, University of Minnesota and the Minnesota State Planning Agency. St. Paul, MN. pages 38-48.

- 1) Mean daily max. temp. July: 82-86°F.
- 2) Last Spring frost: 12-31 May (32°F) First Fall frost: 16-25 Sept. (32°F) Growing degree days: 1600-2200 (cumulative total of degrees that average daily temps. exceed 50°F during the growing season.
- 3) Annual precipitation: Less than 22" to 24" Annual snowfall: Less than 40"
- 4) Climatic zone: Zone 4 (limited to small grains and forage crops).

APPENDIX III

Minnesota Historical Society Site Forms

9 October 1981

The following sources were consulted in the course of the literature search:

- a) SHPO Archaeological files: reports file. Although no known sites are recorded for the Study Area, we pulled the following from the files: A report (enclosed) by Streiff (1974) for the Corps on nearby South Branch of the Wild Rice River; a letter from Michlovic (1981) on another nearby project (enclosed); results of a Michlovic (1976) survey on the Wild Rice River. We checked Winchell's Aborigines of Minnesota (1911), and found nothing. (However, we have enclosed the Winchell material on Polk and Norman counties.)
- b) We checked the North Dakota Room, Chester Fritz Library, UND for literature on early immigration to Norman County and found nothing specific on the Study Area. However, we are enclosing an M.A. Thesis by Tollefson (1917) which speaks to Norwegian immigration in Norman County, Minnesota (enclosed).
 - c) Trygg, J. William
 1967 Composite Map of United States Land Surveyors' Original
 Plats and Field Notes, Sheet 20, Minnesota Series.

(We found nothing on the Trygg map, therefore there are no recorded pre-1871 sites--map enclosed).

- d) We searched Gilman, Gilman and Stultz (1979) for possible Red River Oxcart Trails through the Study Area. There were none.
 - Gilman, Rhoda, Carolyn Gilman, and Deborah Stultz

 1979 The Red River Trails: Oxcart Routes Between St.

 Paul and the Selkirk Settlement, 1820-1870. St.

 Paul, Minnesota Historical Society.
 - e) Physiography: see enclosed, Sims and Murray (1972).
- f) Physiography and vegetation: see enclosed, Minnesota Historical Society (1981).
 - g) Hydrology: see enclosed Kanivetsky map (1979).
 - h) Quaternary: see enclosed, Goebel and Walton map (1979).
 - i) Soils: see enclosed, Arneman (1963).
 - j) Geology of Norman County: see enclosed, Winchell (1899).
- k) Lake Agassiz: see enclosed Waters (1977) (also environment and history.
 - 1) Physiography: Schwartz and Thiel (1978) enclosed.

Literature Search, page 2

- m) History: see enclosed, Upham (reprinted. 1969) (specifically Norman County).
 - n) History: see enclosed, C.F. Cooper and Co. (1909:967-972).
 - o) Vegetation, early: see enclosed, Swanholm (1978).
- p) Original Vegetation: Marschner (1974) indicates that the Study Area is composed at settlement of riverbottom forest along the Red River of the North, i.e., elm, ash, cottonwood, box elder, oaks, basswood, soft maple, willow, aspen, hackberry; and two types of grassland: 1) prairie, and 3) wet prairie (marshes and sloughs, marsh grasses, flags, reeds, rushes, wild rice, with willow and alder-brush in places). The citation of this is the Marschner map:

Marschner, Francis J.

1974 The Original Vegetation of Minnesota: Compiled from U.S. General Land Office Survey Notes. North Central Experiment Station, U.S. Department of Agriculture. St. Paul, MN.

More detail on the riverbottom forest, prairie, and wet prairie is provided by Heinselman (1974), enclosed.

q) The literature search indicates that very little has been done in the way of written histories of the town of Halstad and the Norman County area. No recent bicentennial history of Halstad was written. The best old county histories are thin and are Cooper and Co. (1909) and Turner and Semling (1918). The most recent history of Norman County is Norman County Statehood Centennial Committee (1958). We have checked the WPA Writers' Project for work in Norman County. There was none. The citation is:

Works Progress Administration
1937-1942 Inventory of the County Archives of Minnesota, 44
vols. St. Paul, MN.

- r) Turner and Semling (1918), enclosed for Larson, Sulerud, and Grothe whose names appear on the Historic Plat Map of the Study Area from 1910, see enclosed.
- s) See also. Standard Atlas of Norman County (1927), enclosed. Neither of these maps indicate a house or structure of any kind at the location of the five sites which you gave us to search.
- t) More information of a historic nature and biographical info. on the owners of the sections in question appear in Taylor Pub. Co. (1976), enclosed.
- u) Enclosed, a copy of our letter to the Norman County Historical Society requesting of them info. on the sites you located. They

COUNTY	SITE NAME	INNESOTA ARCHAEOLOGICAL SITE FORM FIELD NUMBER IS				STATE NUMBE
WOON IT			1	-		
Norman	Riverside	2	HAS	8118-03		21 NR 29
OWNER				U.S.G.S. Q	UAD	
V. Sulerud, J.	. Kulstad, V. Moone	ey; Halstad, M	1	L	·	ota-North D
SITE LOCATION				LEGAL DE	SCRIPTION	
From intersecti	on of U.S. Highway	75 and MN High	hway 200, i	n NE'z NE'z	Section	25, T145N,
Halstad, go 0.5	mi. west on MN Hig d and west of a far	gnway 31. Sit rmstead.	e is mainly	' and ₩½ N₩½ N	₩¼ Secti	lon 30, T14
ORIGINALLY RE	CORDED BY M. MIC.	HLOVIC, 10 D	EC 1981			
SITE TYPE			PROBABLE	CULTURAL	COMPONE	NTS:
	ural material scat	ter	Late Woodl	and, with	ceramics	3
SCATTER OF Abor	iginal cultural may	terial: 450 m	SW to NF hu	170 m NTJ	to SE. c	on an old +
250 m southeast	of meander in Red	River. Forme	rly the loc	ation was	bounded	by a west
in river; now a	large east loop me ay 31 crosses souti	eander scar is	immediatel	y south.	Riversio	le park is
highway.	ay 31 crosses sout			LITACES A.		
SITE CONDITION		CURRENT LAND		الساءور		SITE AREA 450 m SW-N
Site is disturb windbreak trees	ed by farming & . Artifacts	Part of site trees, and a	•			170 m NW-S
scattered by pl	owing.	South of MN	13 are plow			
TATURE OF NEARES	T WATER	DISTANCE	TO WATER		1	N OF SITE FR
Red River, 250	m northwest	250 m no	rthwest		1	outheast an ast-northea
C. C.MTION OF CITE:						
ELEVATION OF SITE:	000 It. (202 m)	1	N OF NEARES			
NATURE, EXTENT OF INVESTIGATION:		1				
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV	Intensive, pedest Subsurface shove	trian reconnais L tests by two	ssance surv persons on	ey by 2 pe 26 Octobe	ersons on er 1981.	26 Sept 19
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12	Intensive, pedest Subsurface shovel /ED, RECOVERED: cord-roughened (wr	trian reconnais tests by two apped paddle-s	sance surv persons on tamped), gr	ey by 2 pe 26 Octobe (an	ersons on er 1981.	26 Sept 19
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12 earthenware pot	Intensive, pedest Subsurface shove	trian reconnais tests by two apped paddle-s mm thick; one	ssance surv persons on tamped), gr small Knife	ey by 2 pe 26 Octobe (an rit-tempero	ersons on er 1981. Id one shed int flake	26 Sept 19
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12 earthenware pot	Intensive, pedest Subsurface shovel (ED, RECOVERED: cord-roughened (wr. sherds, 7 mm to 4 mssel shell frag.; m	trian reconnais tests by two apped paddle-s mm thick; one	ssance surv persons on tamped), gr small Knife agments.	ey by 2 pe 26 Octobe (an	ersons on er 1981. Id one shed int flake	ell-tempere
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12 earthenware pot zite chunks; mu	Intensive, pedest Subsurface shovel /ED, RECOVERED: cord-roughened (wr sherds, 7 mm to 4 m ssel shell frag.; m	trian reconnais tests by two apped paddle-s mm thick; one	persons on tamped), gr small Knife agments.	ey by 2 pe 26 Octobe (an it-tempero River fl:	ersons on er 1981. Id one shed int flake	ell-tempere abe; various = 240 m
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12 earthenware pot zite chunks; mu	Intensive, pedest Subsurface shovel /ED, RECOVERED: cord-roughened (wr sherds, 7 mm to 4 m ssel shell frag.; m	trian reconnais l tests by two apped paddle-s mm thick; one mammal bone fr	sance surversons on tamped), gramall Knife agments.	ey by 2 pe 26 Octobe (an it-tempero River fl:	ersons on er 1981. Id one shed int flake	26 Sept 19 ell-tempere abe; various = 240 m
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12 earthenware pot zite chunks; mu LOCAL COLLECTION None known at t	Intensive, pedest Subsurface shove! VED, RECOVERED: cord-roughened (wr. sherds, 7 mm to 4 mseel shell frag.; mseel shell frag.	apped paddle-s mm thick; one mammal bone fr PREVIOUSLY SITE BOUND	sance surversons on tamped), grantli Knife agments. RECORDED ARY	ey by 2 pe 26 Octobe (an it-tempero River fl:	ersons on er 1981. Id one shed int flake	ell-tempere ab e; various = 240 m HASI SITE
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12 earthenware pot zite chunks; mu LOCAL COLLECTION None known at t WRITTEN REFEREN Red River Archae	Intensive, pedest Subsurface shove! VED, RECOVERED: cord-roughened (wr. sherds, 7 mm to 4 is ssel shell frag.; is sel shell frag.; is shell frag.; is time. CES Preliminary Recological Survey, is	apped paddle-s mm thick; one mammal bone fr PREVIOUSLY SITE BOUND eport on the Mills Norman County,	ssance surversons on tamped), grantly knife agments. RECCRDED ARY iddle MN. (1981)	ey by 2 pe 26 Octobe (an it-tempero River fl: MAP SCAL 24 660	ersons on er 1981. Id one shed int flake	ell-tempere ab e; various = 240 m HASI SITE
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12 earthenware pot zite chunks; mu LOCAL COLLECTION None known at t WRITTEN REFEREN Red River Archae M.G. Michlovic, COMMENTS:	Intensive, pedest Subsurface shove! VED, RECOVERED: cord-roughened (wr. sherds, 7 mm to 4 ms ssel shell frag.; marked) IS, INFORMANTS: his time. CES Preliminary Recological Survey, 1 Dept. Soc & Anthro	apped paddle-s mm thick; one mammal bone fr PREVIOUSLY SITE BOUND eport on the Mi Norman County, opology, Moorhe	ssance surversons on tamped), gramall Knife agments. RECCRDED ARY iddle MN. (1981) ead St University	ey by 2 per 26 Octobe (and it-temper of River fl.) MAP SCAL WAR SCAL TRAILL CO	ersons on er 1981. Id one shed int flake	ell-tempere ab e; various = 240 m HASI SITE
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12 earthenware pot zite chunks; mu LOCAL COLLECTION None known at t WRITTEN REFEREN Red River Archae M.G. Michlovic, COMMENTS: A proposed U.S.	Intensive, pedest Subsurface shovel (ED, RECOVERED: cord-roughened (wr. sherds, 7 mm to 4 seel shell frag.; seel shell f	apped paddle-s mm thick; one mammal bone fr PREVIOUSLY SITE BOUND eport on the Mi Norman County, opology, Moorhe ineers flood c	ssance surversons on tamped), gramall Knife agments. RECCRDED ARY iddle MN. (1981) ead St Universontrol leve	ey by 2 per 26 Octobe (and it-temper of River fl.) MAP SCAL 24 366 NORMAN CO TRAILL CO	ersons on er 1981. Id one shed int flake	ell-tempere ab e; various = 240 m HASI SITE
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12 earthenware pot zite chunks; mu LOCAL COLLECTION None known at t WRITTEN REFEREN Red River Archae M.G. Michlovic, COMMENTS: A proposed U.S. would transect	Intensive, pedest Subsurface shove! VED, RECOVERED: cord-roughened (wr. sherds, 7 mm to 4 ms ssel shell frag.; marked) IS, INFORMANTS: his time. CES Preliminary Recological Survey, 1 Dept. Soc & Anthro	apped paddle-s mm thick; one mammal bone fr PREVIOUSLY SITE BOUND eport on the Million Norman County, opology, Moorhe ineers flood c N-S and along	tamped), gr small Knife agments. RECCRDED ARY iddle MN. (1981) ead St Univ	ey by 2 per 26 Octobe (and it-temper of River fl.) MAP SCAL 24 366 NORMAN CO TRAILL CO	ersons on er 1981. Id one shed int flake	ell-tempere ab e; various = 240 m HASI SITE
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12 earthenware pot zite chunks; mu LOCAL COLLECTION None known at t WRITTEN REFEREN Red River Archae M.G. Michlovic, COMMENTS: A proposed U.S. would transect N and S of the mostly where pr	Intensive, pedest Subsurface shove! VED, RECOVERED: cord-roughened (wr. sherds, 7 mm to 4 ms ssel shell frag.; makes to the stime. VES Preliminary Recological Survey, 1 Dept. Soc & Anthrough Army Corps of Engthe site generally	apped paddle-s mm thick; one mammal bone fr PREVIOUSLY SITE BOUND eport on the Mi Norman County, opology, Moorhe ineers flood c N-S and along his disturbanc	tamped), grandl Knife agments. RECCRDED ARY iddle MN. (1981) ead St Univontrol leve the roads would be	ey by 2 per 26 Octobe (and it-temper of River fl.) MAP SCAL 24 366 NORMAN CO TRAILL CO	ersons on er 1981. Id one shed int flake	26 Sept 19 ell-tempere ab e; various = 240 m HASI SITE LIMITS
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12 earthenware pot zite chunks; mu LOCAL COLLECTION None known at t WRITTEN REFEREN Red River Archae M.G. Michlovic, COMMENTS: A proposed U.S. would transect N and S of the mostly where pr	Intensive, pedest Subsurface shove! /ED, RECOVERED: cord-roughened (wr. sherds, 7 mm to 4 seel shell frag.; seel shell	apped paddle-s mm thick; one mammal bone fr PREVIOUSLY SITE BOUND POOR on the Mi Norman County, opology, Moorhe ineers flood c N-S and along his disturbanc (farming, roa	tamped), gr small Knife agments. RECCRDED ARY iddle MN. (1981) ead St Univ ontrol leve the roads e would be ds) is	ey by 2 per 26 Octobe (and it-temper of River fl.) MAP SCAL 24 366 NORMAN CO TRAILL CO	ersons on er 1981. Id one shed int flake	ell-tempere ab e; various = 240 m #ASI SITE
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12 earthenware pot zite chunks; mu LOCAL COLLECTION None known at t WRITTEN REFEREN Red River Archa M.G. Michlovic, COMMENTS: A proposed U.S. would transect N and S of the mostly where pr evident. Survey done for	Intensive, pedest Subsurface shove! VED, RECOVERED: cord-roughened (wr. sherds, 7 mm to 4 is ssel shell frag.; is sel shell f	apped paddle-s mm thick; one mammal bone fr PREVIOUSLY SITE BOUND eport on the Mi Norman County, opology, Moorhe ineers flood c N-S and along his disturbanc (farming, roa f Engineers by	ssance surversons on tamped), gramall Knife agments. RECCRDED ARY iddle MN. (1981) ead St Universon on trol leverson the roads would be ds) is	ey by 2 per 26 Octobe (and it-temper of River fl.) MAP SCAL 24 366 NORMAN CO TRAILL CO	ersons on er 1981. Id one shed int flake	26 Sept 19 ell-tempere abe; various = 240 m HASI SITE LIMITS
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12 earthenware pot zite chunks; mu LOCAL COLLECTION None known at t WRITTEN REFEREN Red River Archae M.G. Michlovic, COMMENTS: A proposed U.S. would transect N and S of the mostly where pr evident. Survey done for cal and Archaeo	Intensive, pedest Subsurface shove! /ED, RECOVERED: cord-roughened (wr. sherds, 7 mm to 4 seel shell frag.; seel shell	apped paddle-s mm thick; one mammal bone fr PREVIOUSLY SITE BOUND eport on the Mi Norman County, opology, Moorhe ineers flood c N-S and along his disturbanc (farming, roa f Engineers by nc. (HASI), 22	ssance surversons on tamped), grantle knife agments. RECCRDED ARY iddle MN. (1981) ead St Universon on the roads agments and st Universon on the roads agments.	ey by 2 per 26 Octobe (and it-temper of River fl.) MAP SCAL 24 366 NORMAN CO TRAILL CO	ersons on er 1981. Id one shed int flake	26 Sept 19 ell-tempere ab e; various = 240 m HASI SITE LIMITS
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERV Recovered: 12 earthenware pot zite chunks; mu LOCAL COLLECTION None known at t WRITTEN REFEREN Red River Archae M.G. Michlovic, COMMENTS: A proposed U.S. would transect N and S of the mostly where pr evident. Survey done for cal and Archaeo	Intensive, pedest Subsurface shove! VED, RECOVERED: cord-roughened (wr. sherds, 7 mm to 4 medical shell frag.; managements) VES Preliminary Responded Survey, 10 medical Survey, 10 medical Survey, 10 medical step generally main site area. The evious disturbance of U.S. Army Corps of logical Surveys, I medical Surve	apped paddle-s mm thick; one mammal bone fr PREVIOUSLY SITE BOUND eport on the Mills Norman County, opology, Moorhe ineers flood c N-S and along his disturbanc (farming, roa f Engineers by nc. (HASI), 22 1 (701) 746-	ssance surversons on tamped), grant small Knife agments. RECORDED ARY iddle MN. (1981) and St Universon tool leverson the roads would be ds) is Histori- 07 Spring- 0810 2	ey by 2 per 26 Octobe (and it-tempers River fl. MAP SCAL 24 24 26)	ersons oner 1981. Id one shied int flake	26 Sept 19 ell-tempere ab e; various = 240 m 66. HASI SITE LIMITS Water
NATURE, EXTENT OF INVESTIGATION: ARTIFACTS OBSERVE Recovered: 12 earthenware pot zite chunks; mu LOCAL COLLECTION None known at t WRITTEN REFEREN Red River Archae M.G. Michlovic, COMMENTS: A proposed U.S. would transect N and S of the mostly where pr evident. Survey done for cal and Archaeo brook Court, Gr	Intensive, pedest Subsurface shove! VED, RECOVERED: cord-roughened (wr. sherds, 7 mm to 4 medical shell frag.; managements) VES Preliminary Responded Survey, 10 medical Survey, 10 medical Survey, 10 medical step generally main site area. The evious disturbance of U.S. Army Corps of logical Surveys, I medical Surve	apped paddle-s mm thick; one mammal bone fr PREVIOUSLY SITE BOUND eport on the Mills Norman County, opology, Moorhe ineers flood c N-S and along his disturbanc (farming, roa f Engineers by nc. (HASI), 22 1 (701) 746- 5. REPOSITO Archaeo	ssance surversons on tamped), grantle knife agments. RECCRDED ARY iddle MN. (1981) ead St Universon on the roads agments and st Universon on the roads agments.	ey by 2 per 26 Octobe (an it-tempere River fl. MAP SCAL 24 sec)	INVESTIGE K. Good	ell-tempere abe; various = 240 m HASI SITE LIMITS Water

MINNESOTA ARCHAEOLOGICAL SITE FORM							
COUNTY	SITE NAME	FIELD NUMBER	STATE NUMBER				
NORMAN	RIVERSIDE	HAS8118-03	21 NR 29 👯				



VIEW OF SITE - LOOKING SOUTH, SOUTHEAST

NESO	U	LOGICA				<u> </u>		747-	
		1 - 18		NUMB			Is		NUI
1		_	HA:		18-01			21	NR
				U.S.	3.S. Q	DAU			
						, Mi			Nort
	_				AL DE	SCRIP	TION		
sec emete	ro sc	lstad, oad at outh, g north	nor	h		SW¼ 5N, F		NW ¹ 4	Sect
	-	ROBABL	E C	111 TI	IRAL	COM	DONE	NTC	
home		Euro-An							
	_								
ea of	wŀ	th cent hich ha nts are	ıs b	een	plowe	ed, a	bout	30	n no
CUR	IS	E						SITE	ARE
Cı	iε	eld.							m N- m E-
	T	O WATER	₹			DIRE	CTION	OF	SITE
	sc	out hwes	t			1,	440 1	m no	rthe
	N	OF NEA	RES1	TAW	ER: A	bout	840	ft.	
rian	by	y 2 per	son	s.	Arti	acts	not	col	lect
		tifacts etc.	, i	nclu	ding	G1.	ass a	and	glaz
				MAP	SCA	LE:	1 cm	= 2	40 1
			1	1		Soul	h Cein	: J o 15	
							alsta	d į	
				***			M 67.1		
			, , , , ,	ŀŗ	<u> </u>			,	
	_		 .	! i					
e sit	1 t	tural		2/130	• <i>,</i> ì				
of ar	ic	can						10 11 11 11	
f En (HAS	H	listori ingbro	cal ok					50 3	
	_]	7	M 859				
S .									
S .		Y: and Fo	 rks			, ND	INVE	INVESTIG	INVESTIGATOR

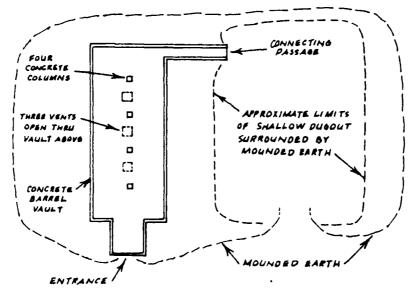
	MINNESOTA ARCH	AEOLOGICAL SITE FORM	
COUNTY	SITE NAME	FIELD NUMBER	STATE NUMBER
NORMAN	HOMESTEAD	HAS 8118-01	21 NR 39H



VIEW OF SITE - LOOKING EAST

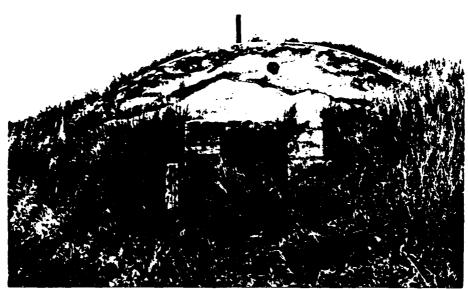
		ESOTA ARCHAI			<u> </u>	
COUNTY	SITE NAME			NUMBER		STATE NUMBER
Norman	Potato Hous	se	HAS	8118-02		21NR 40H
OWNER				U.S.G.S. Q	UAD	
Unknown at this ti	me.			l	·	sota-North Dak
SITE LOCATION				LEGAL DE	SCRIPTIO	N
From intersection Halstad, go 0.4 mi existing dike at t	. west. Site is			SW½ NW T145N,		ection 30,
SITE TYPE Euro-American, ear	ly 20th century		PROBABLE (Euro-Ameri			
SITE DESCRIPTION						
A potato storage b with four support photograph. The d 1939 inscribed in	pillars centered ata 1929 is inse	d longitudinal cribed in fres	lly. See at sh concrete	tached sk on inside	etch sho wall a	eet and nd the date
SITE CONDITION		CURRENT LAND	USE			SITE AREA
Good, no obvious s lism or material r	_	Potato house	e has been a	bandoned.		15 m N-S by 25 m E-W
ATURE OF NEAREST WA	ATER	DISTANCE	TO WATER		DIRECTIO	N OF SITE FROM
Red River		700 m e	east		700 m	east
				T WATCO:		
LEVATION OF SITE: NATURE, EXTENT OF INVESTIGATION: Si	860 ft. (262 m)	ELEVATIO	ON OF NEARES		About	840 ft.
LEVATION OF SITE:	te inspected.	ELEVATIO	ON OF NEARES		About	840 ft.
ELEVATION OF SITE: NATURE, EXTENT OF INVESTIGATION: Si ARTIFACTS OBSERVED, Sparse scatter of	te inspected. ARECOVERED:	ELEVATION Architectural	ON OF NEARES	pped (see	About attache	840 ft. ed sheet).
ELEVATION OF SITE: NATURE, EXTENT OF INVESTIGATION: Si	te inspected. ARECOVERED:	ELEVATION Architectural	ON OF NEARES	pped (see	About attachements,	840 ft. ed sheet).
LEVATION OF SITE: NATURE, EXTENT OF INVESTIGATION: Si ARTIFACTS OBSERVED, Sparse scatter of wooden wagon parts OCAL COLLECTIONS,	te inspected. A RECOVERED: Euro-American con, etc. INFORMANTS:	ELEVATION Architectural ultural materi	features ma	pped (see	About attachements,	840 ft. ed sheet). glass sherds,
ELEVATION OF SITE: NATURE, EXTENT OF INVESTIGATION: Si ARTIFACTS OBSERVED, Sparse scatter of wooden wagon parts OCAL COLLECTIONS, A neighbor said th	te inspected. A RECOVERED: Euro-American con, etc. INFORMANTS:	ELEVATION Architectural ultural materi	features ma	pped (see iron frag	About attachements,	840 ft. ed sheet). glass sherds,
LEVATION OF SITE: NATURE, EXTENT OF INVESTIGATION: Si ARTIFACTS OBSERVED, Sparse scatter of wooden wagon parts OCAL COLLECTIONS,	te inspected. A RECOVERED: Euro-American con, etc. INFORMANTS:	ELEVATION Architectural ultural materi	features ma	pped (see iron frag	About attachements,	840 ft. ed sheet). glass sherds,
ELEVATION OF SITE: NATURE, EXTENT OF INVESTIGATION: Si ARTIFACTS OBSERVED, Sparse scatter of wooden wagon parts OCAL COLLECTIONS, A neighbor said th	te inspected. RECOVERED: Euro-American co , etc. INFORMANTS: ne structure serv	ELEVATION Architectural ultural materi	features made al such as constorage	pped (see iron frag MAP SCAL	About attachements,	840 ft. ed sheet). glass sherds,
ELEVATION OF SITE: NATURE, EXTENT OF INVESTIGATION: Si ARTIFACTS OBSERVED, Sparse scatter of wooden wagon parts OCAL COLLECTIONS, A neighbor said th house.	te inspected. RECOVERED: Euro-American con etc. INFORMANTS: Be structure services	ELEVATION Architectural ultural materi	features made al such as constorage	pped (see iron frag	About attachements,	840 ft. ed sheet). glass sherds,
ELEVATION OF SITE: NATURE, EXTENT OF INVESTIGATION: Si ARTIFACTS OBSERVED, Sparse scatter of wooden wagon parts OCAL COLLECTIONS, A neighbor said th house. WRITTEN REFERENCES	te inspected. RECOVERED: Euro-American con etc. INFORMANTS: Be structure services	ELEVATION Architectural ultural materi	features madal such as	pped (see iron frag MAP SCAL	About attachements,	840 ft. ed sheet). glass sherds,
ELEVATION OF SITE: NATURE, EXTENT OF INVESTIGATION: Si ARTIFACTS OBSERVED, Sparse scatter of wooden wagon parts OCAL COLLECTIONS, A neighbor said th house. WRITTEN REFERENCES	Euro-American cos, etc. INFORMANTS: se structure services stime.	ELEVATION Architectural ultural material wed as a potate ROW of a floor	features made al such as control in	pped (see iron frag MAP SCAL 4 860 IORMAN CO TRAILL CO	About attachements,	840 ft. ed sheet). glass sherds, m = 240 m
ELEVATION OF SITE: NATURE, EXTENT OF INVESTIGATION: Si ARTIFACTS OBSERVED, Sparse scatter of wooden wagon parts OCAL COLLECTIONS, A neighbor said th house. WRITTEN REFERENCES None known at this COMMENTS: Site is near, but	Euro-American constant constan	ELEVATION Architectural sultural material wed as a potate wed as a potate strong of Engineers by veys, Inc. (Hz.)	features made al such as control in the control in	pped (see iron frag MAP SCAL 4 860 IORMAN CO TRAILL CO	About attachements,	840 ft. ed sheet). glass sherds,
ATURE, EXTENT OF INVESTIGATION: SI ARTIFACTS OBSERVED, Sparse scatter of wooden wagon parts OCAL COLLECTIONS, A neighbor said the house. WRITTEN REFERENCES None known at this COMMENTS: Site is near, but levee proposed by Survey done for U. Historical and Arc 2207 Springbrook Company of the state of th	Euro-American constant constan	ELEVATION Architectural sultural material wed as a potate wed as a potate state of Engineers by veys, Inc. (Hz. ks, ND 58201	features made all such as to storage decontrol in the control in t	pped (see iron frag MAP SCAL 4 860 IORMAN CO TRAILL CO	About attachements,	840 ft. ed sheet). glass sherds, m = 240 m

MINNESOTA ARCHAEOLOGICAL SITE FORM						
COUNTY	SITE NAME	FIELD NUMBER	STATE NUMBER			
NORMAN	POTATO HOUSE	HAS 8118-02	21 NR 40 KH			





PLAN VIEW OF POTATO HOUSE SITE



VIEW OF POTATO HOUSE - LOOKING NORTH

								PAGE 1 OF 2
٠(٠)	· · · · · · · · · · · · · · · · · · ·		SOTA ARCHA	EOLOG				
از ,	COUNTY	SITE NAME		1		NUMBER	ļ	STATE NUMBER
-	Norman	Log Buildir	ng		HAS 8	118-04		21 NR 42H
T	OWNER					U.S.G.S. QL	JAD	
Ì	Unknown at this time.							ota-North Dakota
5	SITE LOCATION					LEGAL DE	SCRIPTIO	N
	From intersection of togo 0.3 mi. (450 m) westreet, go 0.1 mi. Sometheet metal barn.	st on MN 31.	Turn north	onto c	ity a	R 48W		tion 30, T145N,
Ī	SITE TYPE			PROB	ABLE C	ULTURAL	COMPON	ENTS:
- 1	Euro-American; sawed .	logs		Euro	-Ameri	can late	19th-ea	rly 20th century
4	A log structure on we east. Logs are broad- rather than being ful- but abandoned.	-axed with sa	wed ends, abo	ut 15	cm by	28 cm, bu	t piece	d end to end
ţ	SITE CONDITION		CURRENT LAND	USE	·			SITE AREA
	Good, No sign of vand Some recent debris acc around site.		Structures playground					50 m by 50 m
_	NATURE OF NEAREST WATER		DISTANCE	TO WA	TER		DIRECTIO	N OF SITE FROM W
	Red River		410 m w					east-southeast
- [ELEVATION OF SITE: 865	ft. (264 m)	ELEVATIO	ON OF N	EAREST	WATER:	About 8	40 ft.
Ī	NATURE, EXTENT OF Site in INVESTIGATION:	nspected. A	rchitectural	featur	es map	ped (see	attache	d sheet).
7	ARTIFACTS OBSERVED, REC	OVERED:						
	Various Euro-American Recent debris is accur					íron, gl		
						MAP SCAL	E 1 cr	m = 240 m
Ī	LOCAL COLLECTIONS, INFO	RMANTS:			3	4 . 80		$+1^{2}$
	None known at this ti	me.			•		• • (
ħ	WRITTEN REFERENCES	····			<u> </u>	WRMAN - CO	<u>)</u>	\cdot
	None known at this time	me.				TRAILL CO		
1	COMMENTS:					859	\ <i>\.\)</i>	
2.3	Site is within an alteral location proposed by 1963 USGS Halstad 7.5 bited structures at the the location of the Survey done for U.S. A cal and Archaeological brook Court, Grand For	U.S. Army Control topo quad of this site. The third structure of the Surveys, In	rps of Engine map shows throne earth mount ture. Engineers, ic. (HASI), 2	ers. ee uni d here by His 207 Sp:	The nha- may	an said	4	Water

REPOSITORY: HAS, Inc.

Grand Forks, ND PROJECT: 8118 INVESTIGATORS:

Kent Good and Jeff Kinn

DATE: 26 September 198

ACCESSION NOS.

PHOTO NOS.

8118-1(15-18) 8118-2(1-3) የኢትዮጵያ የተማሪፈር MINNESOTA ARCHAEOLOGICAL SITE FORM
COUNTY SITE NAME FIELD NUMBER

NORMAN LOG BUILDING

FIELD NUMBER HAS 8/18-04 STATE NUMBER
21 NR42 H



VIEW OF SITE - LOOKING NW. LOG BUILDING ON LEFT. (PHOTO 8/18-1-19)

ACCESSION NOS.

| PHOTO NOS. | 8/18-1 (/6-/8) | 8/18-2 (/-3)

REPOSITORY: HAS, Inc.

GRAND FORKS, ND

PROJECT: HALSTAD 8118

INVESTIGATORS:

KENT GOOD & JEFF KIN

DATE: 26 SEPT 1981

	881818	ESOTA ARCHAEOL	OGICAL &	ITE EADA		PAGE 1 OF
COUNTY	SITE NAME	ESUIA ANCHAEUL		NUMBER		STATE NUMBE
Norman	South Ceme	tery	HAS 8	118-05	}	21 NR 43
				U.S.G.S. Q	IIAD.	
OWNER						sota-North D
Unknown at this	time.			LEGAL DE		
mi. north. Turn	on US Highway 75 an east, go 0.6 mi.	west. Cemetery	0, go 0.2	l	SE' SE	z Section 19
SITE TYPE] PI	ROBABLE C	ULTURAL	COMPON	ENTS:
Euro-American ce	emetery		AD 1891 to	o present	(graves	s)
SITE DESCRIPTION						
·	ay 1820, D. 12 Jan		y is main	tained.		Tors
SITE CONDITION		CURRENT LAND USE	•			SITE AREA
Good, Site is a maintained.	currently being	Cemetery.				84 m N-S 87 m E-W
NATURE OF NEAREST	WATER	DISTANCE TO	WATER	·	DIRECTIO	N OF SITE FRO
Red River		1.8 km we	st		1.8 kr	n east
ELEVATION OF SITE:	873 ft. (266 m)	ELEVATION (OF NEAREST	WATER:	About 8	40 ft.
NATURE, EXTENT OF INVESTIGATION:	Intensive pedestr	ian inventory by	2 person	s.		
ARTIFACTS OBSERVE	ED, RECOVERED:					
The cemetery cur	rrently is maintai	ned, and artifac	ts include	e only he	adstone	s and relate
			{	MAP SCAL	F 1 cr	m = 240 m
LOCAL COLLECTIONS	S, INFORMANTS:			· []	<u>*</u>	1 869
	c time					
linknown at this					, ,	
Unknown at this	s time.				. ,	•
Unknown at this					,	•
	CES				,	
WRITTEN REFERENCE	CES					· ·
Unknown at this COMMENTS: South Cemetery if flood control le	s time. is in the ROW of a evee proposed by t	he U.S. Army Cor	ps of			Halstad
Unknown at this COMMENTS: South Cemetery if flood control le Engineers. Survey done for and Archaeologic Court, Grand For (701) 746-0810	is in the ROW of a evee proposed by t U.S. Army Corps o cal Surveys, Inc. rks, ND 58201	he U.S. Army Cor f Engineers by H (HASI), 2207 Spr	ps of istorical ingbrook			
Unknown at this COMMENTS: South Cemetery if flood control le Engineers. Survey done for and Archaeologic Court, Grand For	s time. is in the ROW of a evee proposed by t U.S. Army Corps of the cal Surveys, Inc. rks, ND 58201	f Engineers by H (HASI), 2207 Spr	ps of istorical ingbrook		INVESTIG	ATORS:
Unknown at this COMMENTS: South Cemetery if flood control le Engineers. Survey done for and Archaeologic Court, Grand For (701) 746-0810	is in the ROW of a evee proposed by t U.S. Army Corps o cal Surveys, Inc. rks, ND 58201	f Engineers by H (HASI), 2207 Spr	ps of istorical ingbrook	ND		of this end

PAGE 2 OF 2

	MINNESOTA ARCHAEO	LOGICAL, SITE FORM	
COUNTY	SITE NAME SOUTH CEMETERY	FIELD NUMBER HAS 8/18-05	STATE NUMBER 21 NR43H



VIEW OF SITE - LOOKING SE (PHOTO BIIB-1-6)

ACCESSION NOS.	PHOTO NOS.	REPOSITORY:	INVESTIGATORS:
	8118-1 (4-9)	HAS, Inc., GRAND FORKS, ND PROJECT: HALSTAD 8118	KENT GOOD AND JEFF KINA DATE: 26 SEPT 1981

APPENDIX IV

Project Correspondence



2207 Springbrook Ct. Grand Forks, North Dakota 58201

(701) 746-0810

13 October 1981

Michael G. Michlovich Professor of Anthropology Moorhead State University Moorhead, MN 56560

Dear Professor Michlovich:

On 28 August 1981, Historical and Archaeological Surveys, Inc. (HASI), which I represent, entered into an agreement with the U.S. Army Corps of Engineers, St. Paul District, to conduct a cultural resources inventory for a flood control project at Halstad, Minnesota. While performing the project records and literature search in St. Paul, it was brought to our attention that you have been working in the Halstad area for a good portion of the 1981 field season. Details were understandably sketchy, but we were told that you have discovered an Archaic Component and had collected datable material. We realize that your report is probably not completed and that you have much publishable data that you would very rightfully not want to divulge at this time. We would, however, greatly appreciate any information you may have collected concerning our specific area that you would be willing to share with us, or any thoughts in reference to a general overview of the Halstad area.

The boundaries of HASI's study area are as follows:

NE $\frac{1}{2}$ of Section 30, T145N, R48W; SE $\frac{1}{2}$ SE $\frac{1}{2}$ of Section 19, T145N, R48W; NE $\frac{1}{2}$ NW $\frac{1}{2}$ of Section 19, T145N, R48W; NE $\frac{1}{2}$ of Section 25, T145N, R49W.

During the HASI field survey of the above area, a crew under the direction of Kent N. Good, archaeologist and HASI president, recorded four historic sites and one prehistoric scatter area. The prehistoric site consisted of a small amount of lithic debris and three ceramic body sherds. Two sherds display cord-roughened surfaces, while the third may have been net- or fabric-impressed.

Any information you may wish to share concerning the Halstad area would be greatly appreciated. I also look forward to meeting informally with you at the Plains Conference in Bismarck, North Dakota. Thank you.

Sincerely,

HISTORICAL AND ARCHAEOLOGICAL SURVEYS, INC.

James C. Dahlberg

James C. Dahlberg Research Archaeologist



moorhead state university moorhead minnesota 56560

Oct. 21, 1981

James C. Dahlberg
Research Archaeologist
Historical and Archaeological Surveys, Inc.
2207 Springbrook Ct.
Grand Forks, N.D. 58201

Dear Mr. Dahlberg,

During the 1980-1981 field seasons I conducted survey and test excavations along the Red River with a crew from Moorhead State Univ. In 1980 we discovered 21 NR 29 in Sec. 25 of your survey area. It is a large artifact scatter (I should say a light scatter over a large area) consisting of about 2 dozen potsherds and bison or cattle bone. The ceramics are primarily shell tempered/cordmarked, some are grit tempered cordmarked. Considering the other sites discovered in the Norman County survey I would call the materials Sandy Lake.

In the 1981 survey we in found additional sites in Sec. 24, but these do not have official state numbers yet. On the enclosed map they are given field numbers only(e.g. NR 40, etc.).

About 7 miles south of Halstad, on the Red River levee we uncovered in 1980 a deeply buried middle Archaic component. We returned to the site this summer and worked it more completely. An odd assortment of points (5 of them) are hard to classify—one base looks Oxbow. A C-14 date of 4330+120 was obtained on the component. Most of the materials from the site are bison bone. Geologists from NDSU have looked at the site and suggested that there is no reason to doubt that similar sedimentary situations exist all along the Red, therefore, we should expect buried components along the Red River levees. Sites may be under 5-6 feet of silt and clay in this area.

I'm sending along a copy of a paper I presented at the Plains Conference--maybe it will be of some help. The Corps Office in St. Paul has a copy of my preliminary report with more detail on the artifacts.

If you need any more information just drop me a line. You're welcome to visit MSU and see the artifacts from the area.

Sincerely,

Much Millers

Michael G. Michlovic an equal opportunity employer

Agency/Individual Called: Michael Michlovic Moorhead State University
Date and Time: 23 Oct. 1981 10:30 am Caller: J. Dahlberg
Regarding: Work on Red River, near Halstad, MN
Notes:
Thanked Mike for information sent about work on Red River near
Halstad, MN. Told him we had duplicated recording site 21NR29. He
stated they had found good amount of Sandy Lake pottery on surface, but
had not tested site in anyway. He feels sites should be tested to
8 ft. if possible in Red River Valley levee areabased on their dis-
covery of an undisturbed Archaic component 7 mi. south of Halstad.
·
Signature: ORIGINAL BY GLD

gency/Individ	lual Called: Barbara O'ConnellAssistant Minnesota State Archaeolo
ate and Time:	23 Oct. 1981 2:30 pm Caller: J. Dahlberg, HASI
egarding: Du	olication of Site 21NR29
otes:	
	ove OlConnoll informed no them such our had been appianed to
	cultural resource sites recorded in the Halstad flood control
	area, and indicated that she couldn't understand how she had
	INR29 in her search. I explained that it was being typed during
	of our files search and she expressed relief.
	e numbers assigned to the five sites by the Minnesota Historical
Society:	
	Riverside - 21NR29 (would have been 21NR41)*
	Homestead - 21NR39H
	Potato House - 21NR40H
	Log Building - 21NR42H
	South Cemetery - 21NR43E
This is	the site that HASI re-recorded during conduct of the survey
it was o	riginally recorded by M. Michlovic in 1980. It will retain
the number	er 21NR29the number 21NR41 has been cleared.
-	
	
	

Agency/Individual Called: Barbara O'ConnellAssistant Minnesota State Archaeologi
Date and Time: 30 Oct. 1981 3:00 pm Caller: J. Dahlberg, HASI
Regarding: Legal location of site 21NR29
Notes:
Informed O'Connell that we determined that Michlovic's 1980
site form for site 21NR29 had the incorrect township location. She
had recently discovered the same error, and the location had been
corrected on the site form now filed at the MSASMHS. I asked
O'Connell if it was O.K. to use a Minnesota Historical Society site
form for site 21NR29 even though we had not yet filed it with the
Society. She said it was O.K., and requested that we forward her
the updated site form.
ignatura: Dela (a) Al Ru (A) D

HISTORICAL RESEARCH, INC.

5406 PENN AVENUE SOUTH MINNEAPOLIS, MINNESOTA 55419

(612) 929.4996

12 October 1981

Mrs. Charles Rector, Curator Norman County Historical Society 404 Fifth Avenue West Ada, Minnesota 56510

Re: A Literature Search and Records Review of lands in and around Halstad, Minnesota; U.S. Army Corps of Engineers, Contract No. DACW37-81-N-2476; under subcontract to Historical and Archaeological Surveys, Inc.

Dear Mrs. Rector:

As part of the above-referenced search for cultural resources such as prehistoric and historic sites, we are writing to enlist your assistance in providing any information you may have on the enclosed list of sites.

We have already checked such sources as the collections of the Minnesota Historical Society and the State Historic Preservation Office and historic maps and plat maps of the area around Halstad, Minnesota.

We are particularly interested in any information your Society may have on the "South Cemetery" in Section 19, Tl45N R48W. Apparently, records in St. Paul at the State Society do not shed light on this cemetery. We do know that the oldest head-stone dates to 1891.

Because of time considerations, we would appreciate your sending your response directly to our prime contractor. Mr. Kent Good c/o Historical and Archaeological Surveys. Inc., 2207 Springbrook Court, Grand Forks, North Dakota 5800.

Thank you for your assistance.

Janene a. C. Scheets

Sincerely,

Norene A. Roberts, President Historical Research, Inc.

cc: HRI File 1072

Agency/Individual Called: Mrs. Charles RectorCurator Norman County Historica
Date and Time: 30 Apr. 1982 10:45 am Caller: J. Dahlberg, HASI
Regarding: Information about Halstad study area.
No.
Notes: Mrs. Rector informed me that she had received letter from Dr.
Noreen Roberts (HRI), dated 12 October 1981. Rector stated that she
had turned the letter over to their director and he had stated that
no such information was available at the Norman County Historical
Society.
Mrs. Rector also requested a copy of the popular report for
the Halstad Flood Control Project.
Signature: ORIBINAL BU QU

Agency/Individual Called: Vincent and Dolly Mooney (218) 456-2372	
Date and Time: 22 Apr. 82 8:30 a.m. Caller: J. Dahlberg, HASI	
Regarding: Permission to curate artifacts from their land at Minnesota His	storical
Society.	
Notes:	
I informed Mrs. (Dolly) Mooney that we had collected archaeolog	ical
material from their property and described that material. I continu	ıed
to explain that we had contacted the Minnesota Historical Society, a	ind
that that agency had agreed to add the material to that which Michael	<u> </u>
Michlovic had collected from the same site (21NR29). I explained to	· –
Mrs. Mooney that the material was the Mooneys' property and would be	-
returned to them if they so desired. Mrs. Mooney said that she felt	:
the material should be forwarded to the Minnesota Historical Society	7
where it would serve a better purpose.	
	
Mrs. Mooney expressed interest in receiving a copy of the popul	<u>.ar_</u>
report when it is completed.	
	
	_
Signature: ORIGINAL BY JO	



2207 Springbrook Ct. Grand Forks, North Dakota 58201 701-775-5090 Home

1702 Dyke Avenue Grand Forks, North Dakota 58201 701-772-6381 Office

3 May 1982

Mr. Robert Clouse Archaeological Division Head Fort Snelling Historical Center Minnesota Historical Society St. Paul, MN 55111

Dear Mr. Clouse:

On 19 April 1982, in a telephone conversation between Mr. Scott Anfinson and Mr. James Dahlberg, Mr. Dahlberg expressed the wish of our firm (Historical and Archaeological Surveys, Inc.—HASI) to enter an agreement under which your agency would curate cultural materials collected from archaeological site 21NR29, Norman County, Minnesota. These materials were collected from the site by a HASI field crew in the fall of 1981, during conduct of a cultural resource inventory for the St. Paul District, Corps of Engineers. It was explained to Mr. Anfinson that the site the materials were collected from was a site recorded originally by Mr. Michael Michlovic in 1980, and re-recorded by HASI crew members in 1981.

The land from which the material was collected is owned by "r. and Mrs. Vincent Mooney. Mrs. (Dolly) Mooney verbally relinquished ownership of these materials, and has requested that they be donated to the Minnessta Historical Society. Mr. Anfinson consulted you, and relayed the message to Mr. Dahlberg that HASI should mail the materials directly to your office. It is understood that you will add these materials to those collected by Mr. Michlovic.

A package containing five parcels with the various material collected from the surface of site 21NR29 by HASI personnel on 26 September 1981 has been forwarded separately, via the United Parcel Service. Parcel #1 contains 13 small cerimic body sherds tentatively determined to represent Sandy Lake Ware of the Late Woodland Period. Parcel #2 contains 10 pieces of lithic material apparently representing chipped stone waste fragments. Parcel #3 contains three unidentified bine fragments and a tooth fragment from a large mammal. Parcel #4 contains two freshwater mussel shell fragments, while Parcel #5 contains part of a chalk tube.

Thank you.

Sincerely,

HISTORICAL AND ARCHAEOLOGICAL

Chele Schrener

SURVEYS, INC.

Michele H. Schreiner

APPENDIX V

Shovel Test Forms

PROJECT HALTEN MINN 81-	18
SITE NAME TIUSUS OF	SITE NUMBER 21 NO 29
SITE TYPE SCATTORED LITHICS	COUNTY/STATE Noeman Ma
مارهم والمراجع	TEST LOCATION APROX 35 m. So or
200 100 m SE OF FOWER FACE -	CHSC : 5 A SO OF A STAND OF TREES
TEST SIZE . 5 m ²	
TEST DEPTH 40 cm	
SURFACE CHARACTERISTICS BEUSAY	MREH PRAIRE (RASSES
SUBSURFACE SOIL CHARACTERISTICS	Topson vory Humic From Lone
DECOMPOSITION NO APPARENT	PLON' ZONE AT APPROX 30 CM
BOLOW SHEFACE - CLAYEY LOAN	APPRILES - INCRETES IN SHUBY
TEXTURE TO THE POTTON OF	P. F
CULTURAL MATERIAL: None Rose	(1/4 - 1)
COMMENTS Ness	
RECORDER SO TAMESON	DATE 10/26/81

PROJECT HALSTHO MINN. 81-19
SITE NAME RIVERSIAN SITE NUMBER 21 N. 29
SITE TYPE SCATTERS LITTLE COUNTY/STATE NORMAN / MN
PIT NUMBER 2 TEST LOCATION APPROL 65 M 50 0F
HAD 200; 125 M Du- SO G. = MOONEY FARN NOWS = 15 M NO OF CLA OLDO
TEST SIZE5 m ²
TEST DEPTH 40 cm
SURFACE CHARACTERISTICS Beusny AREM PRAIRE GRASSER
SUBSURFACE SOIL CHARACTERISTICS Top Soil Very Hume; No
APPARENT PLOW ZUNE; 30-30 CM BELOW SURFACE CLAYEY
LOAM IS ENCOUNTEED - TEXTURE INCREASES IN SHARINGS
TO PIT BOTTOM
CULTURAL MATERIAL: New - Horoveron
COMMENTS News
RECORDER DATE 10/26/81

PROJECT HALSTED MN SI-18
SITE NAME RISESSIDE SITE NUMBER 21 NO 29
SITE TYPE SCATEGES LITTLE COUNTY/STATE NORMAN / MN.
PIT NUMBER 3 TEST LOCATION Arrear 200 m So. OF WO 200; 250 m SW OF Moody FACT HOUSE; 30 n No of CLO CLOC
TEST SIZE
TEST DEPTH 40 CM
SURFACE CHARACTERISTICS TRUSS AREA PRAIRIE CONSSES
SUBSURFACE SOIL CHARACTERISTICS TOP Son NEW HUMIC; NO
APPARTOT PLOW ZONE; AT APPROX 30 (A BELES GROWN LOUSE
Chayey Lean 15 ENCOUNTERED - UERY SANDY TENTERS FOUNTE
Better OF P.T
CULTURAL MATERIAL: Now Recours
•
COMMENTS Vege
RECORDER JI DATE 10/26/81

PROJECT HALSTON MUN 8118
SITE NAME TIMESION SITE NUMBER 2/ N. 29
SITE TYPE Signal Will COUNTY/STATE Norman / MN
PIT NUMBER 4 TEST LOCATION Acres, 100 M So. 60
Mind 200 225 M SW OF NOONEY EARM HOUSE , IN: M NW 0.7 OLD OF OUT
TEST SIZE .5 x 2
TEST DEPTH 40 cm
SURFACE CHARACTERISTICS PLOWS FICE, ROCENTY MARNISTES
SUBSURFACE SOIL CHARACTERISTICS DARK LOW WITH SILT INCLUSIONS;
PLUM ZONE NOTES APPROX ZOIN BELOW SAILTHIE, BELOW THIS
POINT SUIL IS CONSIDERADLY MORT COMPACT, AT ABOUT 33 CA
BEZON SMETHEL SUIL BETTENS DOFINATELY CLAYON WITH INCHASON
SAND CONTENT TO THE PIT BOTTON
CULTURAL MATERIAL: None Transcers

COMMENTS	CONS	SIDERNO	LE AM	OUNT	0 F	BONE	(B.son	ce Bes)	
									EXCAUATION
RECORDER	100	MALUETA	· · · · · · · · · · · · · · · · · · ·		DATE	10/2	6/3/		<u></u>

HISTORICAL AND ARCHAEOLOGICAL SURVEYS, INC.

SHOVEL TEST FORM

PROJECT HASTAD MINN 8118

SITE NAME RIVERS.OF SITE NUMBER 22 NO 27

SITE TYPE SCATTERED LITHICS COUNTY/STATE NOORAN/MU.

PIT NUMBER 5 TEST LOCATION 15 M 50 OF

MINN 200; 200 M 500 CF MANY FARM NEWSON; 200 M 500 CF POOR

TEST SIZE STA 2

TEST DEPTH 40 CM

SURFACE CHARACTERISTICS PLOWED FIGLA, RETURNING MARILISTED:

SUBSURFACE SOIL CHARACTERISTICS DARK LOAD WITH SILT INCLUSIONS,

PLOW 2005 NOTED APPROX 200M BELOW SURVEYOR BELOW

""

SOIL 15 CONSIDERALE MONT COUNTY, WITH INCLUSIONS,

PLOW 300M 518 MIN SILT MORES.

CULTURAL MATERIAL: Non- Tears

SAND CONTENT TO BOSTON OF PT.

RECORDER DATE 10/20/81

PROJECT HALSTAD MINN 8/18
SITE NAME TIVERSIDE SITE NUMBER 21 NR 29
SITE TYPE SCATTERS LTUC COUNTY/STATE Noc. m. / M.
PIT NUMBER 6 TEST LOCATION 10 M No. c County Come
ROAD; 25 m NC OF MN 200; 25 M 50 OF PED PINET; 200 M NWC= MONING FARALLE
TEST SIZE _ Sm ²
TEST DEPTH 35 (m
SURFACE CHARACTERISTICS WOOD - WOOD ALONG LARGE LOS 0=
THE RED PINER! MANY MANY MANY MANY
SUBSURFACE SOIL CHARACTERISTICS VERY HUME SOME Due TO DOWNERS
LITHUES, NO DIFINATE PLOW ZONE, EXTREMOLY SILTY, CLAY
ZONE ENCOUNTED APPROX 30 CM BOLOW SURJENCE CHAY MINO
WITH MUCH SHUIS
CULTURAL MATERIAL: Nove to sources
COMMENTS Now
RECORDER 10/26/81

PROJECT HALSTAD MINN - 8118
SITE NAME TUSCSIDE SITE NUMBER 21 NO 29
SITE TYPE SCATTERED LITTLE COUNTY/STATE NOCHAN MINN.
PIT NUMBER 7 TEST LOCATION 5 M SO OF COURTY
ROND; 75 m NO OF MN200; 75 m SO OF RED PINT; 130 M WN OF MINO
TEST SIZE .5 m ²
TEST DEPTH 35 Cm
SURFACE CHARACTERISTICS FALLOW FICE OF BENIEF GRASSES
SUBSURFACE SOIL CHARACTERISTICS PACK LORS SCIL PROBABLE
PLOW ZONE ENCOUNTERED AT PAPER 20 CA BELOW SUPPERED
BELOW THIS ADINT SOIL BOTONT MOLT COMPACT CLAY LONGS
BUTING APPENS 30 CA BOZON SUPPACE AND BUTTON INCH. HEINEY
MOLE SANGY TO BOTTON OF PIT
CULTURAL MATERIAL: Non- Recorded
COMMENTS Now :
RECORDER SI DATE 10/26/51

PROJECT HALSTON MINN. 81-18
SITE NAME TIJETSION SITE NUMBER 2/ N. 29
SITE TYPE STATERED LITTIE COUNTY/STATE NEW MA
PIT NUMBER 8 TEST LOCATION L. W. W. BECK
APPECE 50 M SO OF COUNTY ROAD, 100 No OF MAZON, 150 M SO OF PEOLINE, 100 M NILL OF MONTHER.
TEST SIZE2
TEST DEPTH 35 Cm
SURFACE CHARACTERISTICS LUGGOSD WIND BRONK MANY FALLOW
LEHUES
SUBSURFACE SOIL CHARACTERISTICS VERY HUMIC SOIL DIE TO DOTO-0:50
LATHUES WITH SILT LOWCOS; NO APPARENT PROID DONE; CLAY
LOUIZ ENGLANDED AT APPOR 25 ON BEZZON SUPPERCE CLAY
LEUGZ EXILARLY SANDY IN TEXTURE
CULTURAL MATERIAL: News Recourses
COMMENTS Now
RECORDER 10/26/31

(è

PROJECT NAME RUSSION SITE NUMBER 21 NC 27 SITE TYPE SCATTOR Lythic COUNTY/STATE NORMAN MA PIT NUMBER 9 TEST LOCATION 25 M 50 05 (0000) F 150 N M CO MA 200; 125 N NO COMBON FACE MOUSE; 125 N E 05 COUNTY TEST SIZE 5 N2 TEST DEPTH 35 CM SURFACE CHARACTERISTICS ROUND FIRED ON EDGE OF WIND BICHNA; FISTO CITEDRAY PARASSED SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF WIND BICHNA; SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS VOTY MADIC OF TO DITCORNA ROW. SUBSURFACE CHARACTERISTICS OF TO DITCORNA ROW. SUBSURFACE SOIL CHARACTERISTICS OF TO DITCORNA	0110722 1201 10141	
SITE NAME ROSSING SITE NUMBER 21 NC 29 SITE TYPE SCATTERS LITTLE COUNTY/STATE NOTE AND STATE NOTE OF COUNTY NA PIT NUMBER 9 TEST LOCATION 25 M 50 OF COUNTY NA 150 N NO OF MO 200; 125 N NO OF MOUSE; 127 N E 07 (200 P). TEST SIZE	PROJECT NASTED MINE SIE	
SITE TYPE SCATTERS LITTLE COUNTY/STATE NORMAN NA PIT NUMBER 9 TEST LOCATION 25 M 50 0 F (0427) F. 170 M 81 CO MM 200; 128 M NU CO MONG FARM HOUSE; 127 M E 02 long. TEST SIZE . 5 m ² TEST DEPTH 35 CM SURFACE CHARACTERISTICS PLOUDE FOLD ON MORE OF WIND BECKES; FIGLO PERSONNY HARVES CO SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS VETY MUMIC DUE TO DETECTION FORM. SUBSURFACE SOIL CHARACTERISTICS DUE TO DETECTION FORM.	SITE NAME RISESION	SITE NUMBER 21 NC 29
TEST SIZE		
TEST SIZE	PIT NUMBER 9	TEST LOCATION 25 m sa OF COUNTY PO
SURFACE CHARACTERISTICS PLOUD FIELD ON EDGE OF WINDBIGHT. FIRED CHOWNY HAVINGS ED SUBSURFACE SOIL CHARACTERISTICS Very whole for the Determinant Edge. SILT WITH TOP SOIL APPEAR DO IN PROCESS SHOWING - Prove that ENCOUNTY - SOIL BROWN TO APPEAR 30 IN BROWN SHOWING. CAPY LEVEL ENGLANDED AT APPEARS 30 IN BROWN SHOWING. CULTURAL MATERIAL: None Transcription.	150 m 40 00 MN 200 1 125 M ALL	U O. = Moonly FARA HOUSE; 125 M & O. = Pan P. W
SURFACE CHARACTERISTICS PLOUD FIELD ON EDGE OF WIND BECKET, FIELD PETENDAY FACUSES SUBSURFACE SOIL CHARACTERISTICS VERY MADIC DIE TO DETENDING ECHI SILT WITH TOT SCILL APPROX 20 (A SIZEN SHEPPICE - PLOUD EN- ENGOLUTION - SOIL BORGE PLOU THAT MICE - SECRET, CLAY LOVE ENGLISHED WITH CLAY CULTURAL MATERIAL: Now = 1 INTERIOR 30 (A BROWN SHEPPICE) COMMENTS NOW	TEST SIZE . 5 m 2	,
SUBSURFACE SOIL CHARACTERISTICS Very Manic Com. SILT WITH TOP SCIL, APPROX 20 (A SILEN SHEPPICE - PLOW 2017 ENCOUNTY - SOIL BATTON AT APPROX 30 (A SILEN SHEPPICE) CLAY LEVEL ENCOUNTY AT APPROX 30 (A SILEN SHEPPICE) CULTURAL MATERIAL: New = Figtericz.		
SUBSURFACE SOIL CHARACTERISTICS Very Manie Die To Determine From Ethical With Tot Soil, Appear 20 CA 2020 SHETTING - PLON ZUN - ENCOUNTERING - PLON	SURFACE CHARACTERISTICS PLOUS F	TOLD ON EDGE OF WINDBICHA;
SILT WITH TOP SCIL, APPROX DO CA BILLY SHEFFICE - PLOW ZUN - ENCOMPTAIN - SOIL BILLY FLOW FLOW TOWN SHOWS MORE LEARNING, CAPY LEVEL ENGLISHED AT APPROX 30 CA BIRDY SHOWS, AUCH SIND MIXED WITH CLAY CULTURAL MATERIAL: Non = FIGTOJOZIO	FIELD PERMANY HARVES ES	
COMMENTS NOW	SUBSURFACE SOIL CHARACTERISTICS V	ENY MUNIC DIE TO DECO-POSIT KENT
CLITY LEVEL EDUCANTERED HT APPROX 30 (1 BERN SARTHER) AUC - 3.100 MINES WITH CLAY CULTURAL MATERIAL: Non - Totaler. D COMMENTS Now=	SILT WITH TOP SCIL APPROL	20 (A BIZEN SHEV-MCC - PLOW ZUN-
CLITY LEVEL EDUCANTERED HT APPROX 30 (1 BERN SARTHER) AUC - 3.100 MINES WITH CLAY CULTURAL MATERIAL: Non - Totaler. D COMMENTS Now=	ENCOMENTAL SOIL BALOW PL	LOW TON 5 MORE REMOVE
CULTURAL MATERIAL: New = Protestant	CLAY LOUIS ENCLANTER #7	APPROX 30 Ca Band Supermen
CULTURAL MATERIAL: Non = Protested COMMENTS None		•
COMMENTS NOW		
	CULTURAL MATERIAL: New - Tieres	: 1 .13
	^ \	
RECORDER	COMMENTS I VONC	
RECORDER DATE		
	RECORDER SO DAMESIZE	DATE 10/26/31

11	
SITE NAME TUSCUSE SITE NUMBER 2/ NC29	
SITE TYPE SCATTEROS LITUIC COUNTY/STATE NOGRAM MIN.	_
PIT NUMBER 10 TEST LOCATION 75 M 50 OF COOK	Leas;
125 M NO OF MOON FARM MULLSE; 15 M NO. OF SWEET 175 M N	سے ہے MN
TEST SIZE 5m ²	
EST DEPTH 35	
SURFACE CHARACTERISTICS POLO FICE FREE PROPERTY HARVESTER	_ .
SUBSURFACE SOIL CHARACTERISTICS DARK HUNG WITH SILT LOUSES!	_
PLUIN ZUNE ENCOUNTERED APPROX 20 CM BEZON AUREMOS SOL	.
BEROW THIS IDINT IS MODE COMPACE - CLAYEN COLL ENCOUNT	∵ 3
PIPPOX 25-32 (- BELOW SHELL SHOOT SHOOT TENTILE OF	
Chay INCERNSES WITH DEPTH TO BOTTON OF PIT	
,	
CULTURAL MATERIAL: Non - Paconon	
COMMENTS None	
	_
RECORDER 50 DATE 10/26/31	_
RECORDER JC DATE 10/26/31	_

PROJECT HALSTAD, MINN. 8118
SITE NAME ZINCZ9
SITE TYPE Scarrows Living COUNTY/STATE Norman / Ma
PIT NUMBER // TEST LOCATION 75 M SO OF COUNTY ROAD
186 m No. c= MN200, 700 M NE CI- MONEY FARE HOUSE, 75 N NE C= BUIN
TEST SIZE .5 m 2
TEST DEPTH 35 CM
SURFACE CHARACTERISTICS TARROSTED FIEDD, RECENTLY HARDOSTED
SUBSURFACE SOIL CHARACTERISTICS TOPSOIL DARK LOAD WITH SILT
INCLUSIONS. PLOW ZONE ENCOUNTEDED MAYER ZOIN BELOW
SULTERT BOROW PLOW ZONE SOIL MORE COMPART CLAY
SOL NOTED AT HEPROX 25 30 (IN BOTTOM SURFACE CLAY
LOUGH VERY SMANY IN TEXTURE
CULTURAL MATERIAL: New - Mecanics
COMMENTS VISC
RECORDER 30 DATE 10/26 31

PROJECT HALSTYS MINN
SITE NAME TISSIS SITE NUMBER 21 NC29
SITE TYPE Scarring Louis COUNTY/STATE Nogram MINN
PIT NUMBER /2 TEST LOCATION SO A SO GE COUNTY POA
225 m No e- MN200; 225 m No ex- Moing FARA HOUST;
TEST SIZE . 5 n 2
TEST DEPTH 35 Cm
SURFACE CHARACTERISTICS PLONES FIELD, ROTEN THE MARGETTE
SUBSURFACE SOIL CHARACTERISTICS CPS DARK LOAR WTY SLT
INCLUSIONS PLOW ZONE ENCLANGED APPROX 30 CM B3;
BUZZOW PLOW ZON- SOIL MORE CO-PACE CLAYEY SANOY
SOIL ENCOUNTED AT INTROL DET CA PS;
CULTURAL MATERIAL: MONE TREESE
À ·
COMMENTS No
RECORDER $\frac{1}{26}$ DATE $\frac{10}{26}$ $\frac{9}{1}$

HISTORICAL AND ARCHAEOLOGICAL SURVEYS, INC. SHOVEL TEST FORM PROJECT HALSTHO MINIS SITE NAME + SITE NUMBER 21 NC 29 SITE TYPE SCATTERS LITTLE COUNTY/STATE NORMAN WIN. PIT NUMBER 13 TEST LOCATION 75 17 No 0 = MN200; 225 m 50 0= Conny ROAD: 150 M ENTOF MONEY FALL HOUSE TEST SIZE . 5 2 TEST DEPTH 35 CA SURFACE CHARACTERISTICS TOURS FIRE RIZERTY HARVESTED SUBSURFACE SOIL CHARACTERISTICS TORSOL DAKK SILTY LOAN PLOW ZONE ENCOUNTERS APPRICE ZOEN BELOW SUPERICE BOZON PLOW ZONE SOLL MORE COMPACT AT APPRICE 30 CM SHRING CLAY CULTURAL MATERIAL: New Teccords

RECORDER S(DATE 10/26/81

PROJECT 4 ALSTHO MINN 81-18	
SITE NAME Honoster	SITE NUMBER 21 N € 39 4
SITE TYPE HISTORIC DESCRI SCATTER	COUNTY/STATE Nocas MN.
PIT NUMBER/	TEST LOCATION 10 M SAST OF
GLAVER CONUNY ROAD . 450 M SO A	WA SURATELY GAST OF SOUTH CONTROLL
TEST SIZE . 5 m 2	·
TEST DEPTH 30	
SURFACE CHARACTERISTICS Rouss	TIELD - POCOUTLY WHRUSSTON
· · · · · · · · · · · · · · · · · · ·	/
SUBSURFACE SOIL CHARACTERISTICS D	ARK LOOM WITH STEM TO SILT
PLOW ZINE NOTES APPROX 2	,
This POINT SOIL IS CONSIDE	•
113 10.01 00.01	remited model country
CULTURAL MATERIAL: 1005 Treson	len
•	
COMMENTS VICE	
RECORDER JC DANGERON	DATE 10 2 6 81

PROJECT HALSTHO TON 8118
SITE NAME HOMESTERS SITE NUMBER 21 N/ 39 H
SITE TYPE HISTORIC DEBER SCOTTER COUNTY/STATE NORM MINN.
PIT NUMBER 2 TEST LOCATION 35 M CAST OF
GLAVER COUNTY ROAM; 475 M SO AND SUGUELY BAST OF SO, M.
TEST SIZE .5 m 2
TEST DEPTH _30
SURFACE CHARACTERISTICS PLOWED FIELD - LECENTY MARGETTES.
SUBSURFACE SOIL CHARACTERISTICS DARK LOAD WITH SAALL AGGENTOGE
SILT, PLOW ZOUE NOTES MPPROX 2004 BEZOW THE SUPPACE
SOIL BOLOW THIS POINT BOTTMET CONSIDERABLY MORE CONPACT
CULTURAL MATERIAL: 130NE HOTONORON
i
COMMENTS VONE
RECORDER S.C. JAMERALL DATE 10/26/81

HISTORICAL AND ARCHAEOLOGICAL SUR	VEYS, INC.
SHOVEL TEST FORM	
PROJECT HALSTA, 11/100 81-1	<u> </u>
SITE NAME HOMESTEND	SITE NUMBER 21 1 39 A
SITE TYPE Historic Desers Scarren	COUNTY/STATE Nogan Vilas
PIT NUMBER	TEST LOCATION 50 M EAST OF
GIHUR COMMY PORD; 500 M	SOUTH AND EAST OF Soury Cometally
TEST SIZE . 5 m 2	
TEST DEPTH 30	
SURFACE CHARACTERISTICS Ponce	FIRED & PROWING HARVESTED
	LIFEY LOAN WITH SMALL HAGENT
OF SILT, FLOW ZOUF NOTED	APRROX. 20 (4 BELOW SYREACT)
BROW THIS POINT THE	SOIL IS CONSIDERABLY MORE CONPACT
CULTURAL MATERIAL: NONE TECC	wer (*)
COMMENTS None	

RECORDER S.C. JAHLINGE DATE 16/26 31

PROJECT HALETAN MINN. 81-18
SITE TYPE Euro- A-man : SAWED LOG SULLOWG COUNTY/STATE NORMEN M', NA
SITE TYPE Eugo- A-man ; SAWED LOG SULLOWG COUNTY/STATE /Volumes // INN
PIT NUMBER TEST LOCATION WEST END OF HIGH MOUNT
APPROX 20 M NORTH OF THE LOG BUILDING
TEST SIZE
TEST DEPTH 30 cm
SURFACE CHARACTERISTICS GRASSES AND WESTS ON MONNE INCLINE.
SUBSURFACE SOIL CHARACTERISTICS DACK LOS MIKES WITH SAND AND
A FOU POSSES
·
CULTURAL MATERIAL: Now = Recovers
COMMENTS NO INDICATION THAT THE MOUND WAS USED IT F
BURIAL STRUCTURE - APPEARS TO BE OF PRENT CRIGIN
RECORDER SALBERS DATE 10 2681

PROJECT HALSTEN WINN 81-18
SITE NAME LOG BALLOWS SITE NUMBER 21 NO 42H
SITE TYPE Euro-Angress: SAWO LOG BALLOW COUNTY/STATE NORMON MINN.
PIT NUMBER 2 TEST LOCATION CONTRE OF LARGE
HIGH MOUND: 25 A NORTH OF LOG BUILDING
TEST SIZE . 5 m ²
TEST DEPTH 30 Cm
SURFACE CHARACTERISTICS GRASSES AND FORES ON MORNE INICIAT
SUBSURFACE SOIL CHARACTERISTICS TO ARK LOOK MITTER THE AND
₽599:CZ
CULTURAL MATERIAL: Non- Horosom
COMMENTS No INDICATION THAT THE MOUND WHE USED AS A
BUDING STENETURE - APPER-DI. TO BE OF PRETOT CHIEN
RECORDER 3. 1 A42801 DATE 10/26/81

PROJECT HALSTAN MINN. 81-18
SITE NAME LOG BALLOING SITE NUMBER 21 NO 42 H
SITE TYPE Euro. Angreed: Sames Log Building COUNTY/STATE Norman Mind.
PIT NUMBER 3 TEST LOCATION EAST COO OF HIGH
Mondo : 20 m Noery 0= LUG BULLOING
TEST SIZE
TEST DEPTH 30 cm
SURFACE CHARACTERISTICS (PASSES AND FORMS ON MORNE INCLINE
SUBSURFACE SOIL CHARACTERISTICS LACK LOAD MIKE WITH SAND AND A
Fow Prosice
CULTURAL MATERIAL: 1 JONE + ECOVENED
COMMENTS NO INDICATION THAT THE MOUND WAS USED HS A
BURIAL STRUCTUR APPOHIS TO BE OF PRONT ORIGIN
RECORDER JO AMABRYA DATE 10/26/31

TEST LOCATION Norm CNO OF LOW MONNY: 10 M SO. CF LC: STRUCTURE TEST SIZE 5 m ² TEST DEPTH 30 CM SURFACE CHARACTERISTICS GRASSES MND FORES ON MORNA INCLINE		
SITE NAME LOC BULGING SITE NUMBER 21 NR 42 H SITE TYPE ENER PRODUCTS; LOG SUILAND (MANG) COUNTY/STATE NORMAN / MAN. PIT NUMBER 4 TEST LOCATION NORM CNO OF LOW MORND: 10 M SO. CF LO: STRUCTURE TEST SIZE . 5 m ² TEST DEPTH 30 CM SURFACE CHARACTERISTICS GRASSES MAN FORES ON MORNA INCLINE SUBSURFACE SOIL CHARACTERISTICS DARK LCAN MINES NITH SAND AND	PROJECT HALSTED MINN. 81-	18
SITE TYPE Euro-American; Los Suilains (SANO) COUNTY/STATE NORMAN 1. MAN. PIT NUMBER 4 TEST LOCATION NORMA CNO OF LOW MONDO; 10 M SU. CF Lo: STRUCTURE TEST SIZE . 5 m ² TEST DEPTH 30 CM SURFACE CHARACTERISTICS (PMSSES MND FORES ON MORNA INCLINE SUBSURFACE SOIL CHARACTERISTICS DARK LORD MINES NITH SANO MN	SITE NAME Loc Busine	SITE NUMBER 21 NO 42 H
TEST LOCATION NORTH CNO OF LOW MONDS: 10 M So. CF Lo: STRUCTURE TEST SIZE .5 m² TEST DEPTH 30 CM SURFACE CHARACTERISTICS CRASSES MND FORES ON MORNE INCLINE SUBSURFACE SOIL CHARACTERISTICS DARK LUM MIXED NITH SAWE MN	SITE TYPE Eura-American: Los Suicains	(SAWG COUNTY/STATE NORMAN 1, NO.
TEST SIZE . 5 m 2 TEST DEPTH 30 CM SURFACE CHARACTERISTICS CINSSES MAD FORES DN MORNA INCLINE SUBSURFACE SOIL CHARACTERISTICS DARK LUMA MIXED NITT SAND MAD		
TEST SIZE . 5 m 2 TEST DEPTH 30 CM SURFACE CHARACTERISTICS (PASSES MAD FORES DO MORNA INCLINE SUBSURFACE SOIL CHARACTERISTICS DARK LUM MIYER WITH SAND MA		
SURFACE CHARACTERISTICS (PASSES AND FORES ON MOUND INCLINE SUBSURFACE SOIL CHARACTERISTICS DARK LAND MIXED NITT SAND AND	_	Lo: STRUCTURE
SUBSURFACE SOIL CHARACTERISTICS DARK LLAN MIXED NITY SAND AND	TEST SIZE 5 m ²	
	TEST DEPTH 30 CM	
SUBSURFACE SOIL CHARACTERISTICS DARK LEAR MIXES NITT SAND AND PETBOLES	SURFACE CHARACTERISTICS C () SSE	S MND FORESS ON MOLNE INCLINE
		DARK LUAR MIXES NITY SANG AND
CULTURAL MATERIAL: RONE RECOURSE		

COMMENTS No INDICATION THAT THE MOUND WAS USED AS

A BURIAL STRUITHES - APPEAR (UKE LARGE MIN. TO BE OF RECORDER DATE 10 26 31

ONO VIII I I I I I I I I I I I I I I I I I
PROJECT HALSTAS - MINN. 31 -18
SITE NAME LOG BAILOING SITE NUMBER 21 NO 424
SITE TYPE Euro : American; same Log Anlows COUNTY/STATE NORMAN MINN.
PIT NUMBER 5 TEST LOCATION ALONG SOUTH WALL
OF BAON; 25 M MAST OF LOG BULLDING
TEST SIZE
TEST DEPTH 40 ca
SURFACE CHARACTERISTICS (1455 AND FORMES
SUBSURFACE SOIL CHARACTERISTICS DARK LEAR SOIL MIXED WITH
SMALL AMOUNT OF SENI! NO APPARENT PLOW ZONE! AT APPORT
30 CM BELOW SUMMICE SOIL BECOMES LIGHTER IN COLOR HAB MORE
SANDY IN TEXTUET; BOTTON OF CONCRETE FOUNDATION REPORTS
AT AFPROX. 35 CM BOLOW SUPERIE - FUOTING PROJECTS TO OUTSIDE
SHIGHTSY
CULTURAL MATERIAL: N. Recovered

COMMENTS	CONCESTE	FOUNDATION	OF	BAIN	U	APPLOX	35 CA	0584
RECORDER	J.C. 7. A	4-8-7/	DA	TE /	26	· /s/		

HISTORICAL AND ARCHAEOLOGICAL SURVEYS, INC. SHOVEL TEST FORM PROJECT HALSTAS MINN 81-18 SITE NAME LOC PULLETA SITE NUMBER 21 NR 42H SITE TYPE Euro - SAWO LO BULLON COUNTY/STATE NOPMAN MILLON PIT NUMBER 6 TEST LOCATION ALONG THE NORMERST CORNER OF THE LOG BUILDING : 25 M ENT OF SALN TEST SIZE · 5 m 2 TEST DEPTH 35 cm SURFACE CHARACTERISTICS GRASSER AND FORME SUBSURFACE SOIL CHARACTERISTICS DARK LOAD SOIL MINES WITH SMALL ARMET OF SAND! NO APPRETUT PLOW ZONE, AT AMERY 30 CA MENTER COLORED SAMON CLAY IN GUCCHUTENOD ! BOTTOL OF THE CONCRETE FOUNDATION IS FOUND AT ABOUT THE SHAE DEPTY

COMMENTS 10000, TE FOUNDATION OF LOG BUILDING IS APPRIX

Edition and Control of the Control

RECORDER SALLAGERA DATE 10 23 81

CULTURAL MATERIAL: TIDDE RECOGGES

30 Ch hoer

Direction 1 and 1
PROJECT Harsing MINN. 81-18
SITE NAME LOG BALLOING SITE NUMBER 21 NO 42H
SITE TYPE Enes. PARTICAN - SANGE COUNTY/STATE NORMAN - MINN
PIT NUMBER 7 TEST LOCATION ALONG THE NORTHWAST
CORNER CE THE LOG BUILDING : 30 A WEST OF BARN
TEST SIZE . 5 m ²
TEST DEPTH 35 CA
SURFACE CHARACTERISTICS GRASSES & FORMES
SUBSURFACE SOIL CHARACTERISTICS DACK LON SOIL MIKED NITY SMALL
A MOUNT OF SAND; 11: APPAIRNT PLOW ZONE; AT APPROX.
30 CM. BROW THE SURFACE LIGHTER COLORED SANDY CLAY IS
ENCOUNTED: BOTTON OF THE CONFRETE STRUCTURE IS FOLING
AT ACOUT THE SAME DOTTO
CULTURAL MATERIAL: 100 = TEROURIS
(ODE (C DOCKEY)
COMMENTS CONCERTS FOUNDATION OF LOG BUILDING IS APPROX
30 Ch Doct
RECORDER SC TOME GETTY DATE 10/26/81

.1
PROJECT HALSTAS IIIIN. 81-18
SITE NAME LOI BULLOING SITE NUMBER 21 NO 42 H
SITE TYPE ELEO- AMERICAN - SALVES LOS SALVES COUNTY/STATE NORMAN MINN
PIT NUMBER 8 TEST LOCATION SE CORNER OF LOC
BUILDING: APPROX 25 M WEST OF BADN
TEST SIZE .5m ²
TEST DEPTH 35CA
SURFACE CHARACTERISTICS GENSSOS MUS FORES
SUBSURFACE SOIL CHARACTERISTICS DARK LOAM SOIL MIR 50 WITH
SUNI, NO APPRENT PLOW ZONE; BOTTON OF CONCRETE FOUNDATION
10 TO AT APPROX 30 CM GOLOW THE SMETHER SOIL THENSE
A WINTER LOLDED SHNDY WAR AT BASE OF PIF (35
in Bolow supposes
CULTUFAL MATERIAL: / JONE - CECUUROR

COMMENTS		NIRETE	Fruesa	<u> </u>	æ .	<u> </u>	Bullo	سر, , د	<u></u>
APPALL	30	in oct							
RECORDER	5.0	1, 44.	ا شد		re	, 2	, 81		

APPENDIX VI

Vitae

VITA

Name: Kent N. Good

Date and Place of Birth: 29 June 1946, Great Falls, Montana

Present Position: Research Archaeologist and President

Historical and Archaeological Surveys, Inc.

2207 Springbrook Court Grand Forks, ND 58201

Education: University of Montana, B.A., 1964-69

University of Montana, M.A., 1969-74

Teaching Experience: 1970-72, Graduate Assistant, University of Montana

1972-73, Instructor, University of North Dakota

Research Experience: 1972-79, Associate Research Archaeologist,

University of North Dakota

1979-81, Research Archaeologist, Historical

and Archaeological Surveys, Inc.

Research: (Conducted for University of North Dakota Archaeological Research)

1970, Archaeological Survey of the Pryor Mountain-Bighorn Canyon Recreation Area, June-Sept.

1971, Field Supervisor, Archaeological Excavation in the Pryor Mountain-Bighorn Canyon Recreation Area, June-Sept.

1972, Field Supervisor, National Park Service, Archaeological Salvage of the Pryor Mountain-Bighorn Canyon National Recreation Area Road - Phase II.

1973, Field Supervisor, National Park Service, Crow Tribal Land Archaeological Survey.

1973, Field Supervisor, Corps of Engineers, Archaeological Excavation of the Moe Site (32MN101), Lake Sakakawea, North Dakota.

1973, Field Supervisor, Bureau of Reclamation, Archaeological Survey of the Patterson Lake and Versippi Reservoir, North Dakota.

1974, Field Supervisor, Archaeological Survey of the Turtle River Watershed, Forest River Watershed, North Dakota, Soil Conservation Service.

1974, Field Supervisor, Archaeological Survey of the Route of the Proposed Dome Pipeline, North Dakota State Historical Society.

- 1974, Field Supervisor, Archaeological Survey of the Shoreline of Lake Homme, North Dakota.
- 1974, Field Supervisor, Archaeological Excavation at the Pretty Creek Archaeological Site, Pryor Mountains, Montana, National Park Service.
- 1975, Field Supervisor, Archaeological Survey of the Warwick-McVille Proposed Canal Route, Garrison Diversion and Proposed Recreation Areas, North Dakota. Bureau of Reclamation.
- 1976, Field Supervisor, Archaeological Investigations in the LaMoure-Oakes and Wild Rice River Project Areas, LaMoure-Oakes Project Area, Garrison Diversion Unit, North Dakota. Bureau of Reclamation.
- 1977, Principal Investigator, Archaeological Test Excavation of the Highway 8 Site, 32DU2, Garrison Reservoir, North Dakota. U.S. Army Corps of Engineers, Omaha District.
- 1977, Field Supervisor, Archaeological Survey of Burlington Dam/Lake Darling, North Dakota. U.S. Army Corps of Engineers, St. Paul District.
- 1978, Principal Investigator, Archaeological Test Excavation of the Anderson Tipi Ring Site (32ML111) for the Falkirk Mining Company, Bismarck, North Dakota.
- 1978, Principal Investigator, Archaeological Test Excavations of Three Sites within Affected Areas of the Proposed Burlington Dam, Souris River Basin, North Dakota. U.S. Army Corps of Engineers, St. Paul District.
- 1979, Principal Investigator, An Archaeological Survey of a Coal Mine Development for the Falkirk Mining Company, Bismarck, North Dakota.
- (Conducted for Historical and Archaeological Surveys, Inc.)
- 1979, Principal Investigator, Archaeological and Historical Survey, Proposed Haul Road and Watershed Project. Indian Head Mine, North American Coal Company, Bismarck, North Dakota.
- 1979, Principal Investigator, Archaeological Supplementary--Literature Consolidation Report for North American Coal Company, Bismarck, North Dakota.
- 1979-80, Principal Investigator, Archaeological Test Excavation, Survey of Mine Area and Oral History Research, Mercer County, North Dakota. Coteau Properties, North American Coal Company, Bismarck, North Dakota.

1980, Principal Investigator, Test Excavation of Sites 32ME217 and 32ME218, Section K, Indian Head Mine, North Dakota.

1980, Principal Investigator, Class III Cultural Resource Inventory, Proposed State Highway 16 Improvement, North Dakota.

1980, Principal Investigator, Cultural Resource Inventory, Proposed Power Plant Site, Otter Tail Power and Stearns-Roger Engineering, North Dakota.

1981, Principal Investigator, Mitigation Plan, Phase I for the Saskatchewan Intertie Transmission Line Right-of-Way, Northwestern North Dakota, Basin Electric Power Cooperative.

1981, Principal Investigator, Cultural Resource Assessment of the Proposed Mining Area, McLean County, North Dakota, The Falkirk Mining Company.

Publications:

1973, Preliminary Land Use, Environmental and Socio-Economic Assessment of the Warroad River and Bull Creek Drainage Area, Minnesota. Richard Bares, Paul B. Kannowski, Ralph D. Kingsbury, Phyllis E. Moen, John R. Reid, Nikki R. Seabloom, co-authors. Institute for Ecological Studies, University of North Dakota, Research Report #4.

1973, Environmental Impact Assessment of the Roseau River, Minnesota. John R. Reid, Ronald J. Hall, Richard Bares, Donald L. Rubbelke, Phyllis Moen, Larry J. Dobesh, co-authors. Institute for Ecological Studies, University of North Dakota, Research Report #5.

1974, A Survey and Synthesis of Archaeological Sites within the Sub-Alpine Ecological Zone, Pryor Mountains, Montana. M.A. Thesis on file at the University of Montana, unpublished.

1974, The Results of the Archaeological Survey in the Grapevine Creek Area, Bighorn Canyon National Recreation Area--1972 Field Season. National Park Service. Lawrence L. Loendorf, co-author.

1975, The Results of the Archaeological Survey of Crow Tribal Lands, Bighorn Canyon National Recreation Area--1972 Field Season. National Park Service.

1976, Preliminary Report of the Cultural Resource Inventory of Portions of the Central North Dakota Section, Garrison Diversion Unit, North Dakota. National Park Service. Frederick Schneider and Kurt Schweigert, co-authors.

1976, Archaeology Investigations in the LaMoure-Oakes Project Area, Garrison Diversion, North Dakota. National Park Service. James C. Dahlberg, William Tibesar, and Susan Vehik, co-authors.

- 1976, The Commissary Ridge Bison Kill (24LM363). Archaeology in Montana 17(1 & 2). Lawrence L. Loendorf, co-author.
- 1977, Archaeological Investigations of the Hendrickson III Site-32SN403, LaMoure-Oakes Project Area, Garrison Diversion Unit, North Dakota. Bureau of Reclamation. James Dahlberg, Thomas Larson, Bruce Benz, and Frederick Schneider, co-authors.
- 1977, Archaeological Investigations in the LaMoure-Oakes and Wild Rice River Project Areas, LaMoure-Oakes Project Area, Garrison Diversion Unit, North Dakota. Bureau of Reclamation. Willard Kinney, Carmen Greenshields, and Bruce Benz, co-authors.
- 1977, Archaeological Test Excavation of the Highway 8 Site, 32DU2, Garrison Reservoir, North Dakota. Omaha District, Corps of Engineers. Jeffrey L. Hauff, co-author.
- 1977, Fortification Sites in the Bighorn Canyon Area. Archaeology in Montana 18(2 & 3). Lawrence L. Loendorf, co-author.
- 1978, An Archaeological Survey: Shoreline of Lake Darling and Proposed Burlington Dam, Flood Control Project Area, Upper Souris River, North Dakota. St. Paul District, Corps of Engineers. Richard A. Fox, co-author, with contributions by Michele Schreiner.
- 1978, Archaeological Test Excavation at the Anderson Tipi Ring Site (32ML111), McLean County, North Dakota: A Cultural Resource Study in Central North Dakota. Falkirk Mining Company, Bismarck, North Dakota. Jeffrey L. Hauff, co-author.
- 1980, A Cultural Resource Assessment of the Pembilier Lake and Dam Flood Control Project (A Literature and Records Search), Pembina River, Pembina and Cavalier Counties, North Dakota. James C. Dahlberg and Larry J. Sprunk, co-authors.
- 1980, Test Excavation of Two Archaeological Sites (32ME217 and 32ME218) within Section K, Indian Head Mine, North American Coal Company. John M. Logan, co-author.
- 1980, Results of a Class III Cultural Resource Inventory, Route and Alternates of the Proposed State Highway 16 Improvement in Golden Valley and McKenzie Counties, North Dakota. John M. Logan, co-author.
- 1981, Results of a Literature Search and Class III Cultural Resource Inventory of Two Proposed Sites for the Location of a Coal-fired Power Plant near Spiritwood, North Dakota. Kurt P. Schweigert, John M. Logan and Cecelia F. Jones, co-authors.
- 1981, Rinal Report Historical and Archaeological Survey and Testing Project, Proposed Mining Area The Coteau Properties Company, Antelope Valley, Mercer County, North Dakota. James C. Dahlberg, Larry Sprunk, and John Logan, co-authors.

1981, Final Report Historical and Archaeological Survey and Testing Project - Proposed Mining Area - Falkirk Mine, McLean County, North Dakota. James C. Dahlberg, Wayne Roberson, Larry Sprunk, and Carl Freuden, contributors. Co-edited with Michele H. Schreiner.

1981, Final Report Mitigation Plan Phase I for the Saskatchewan Intertie Transmission Line Right-of-Way, Northwestern North Dakota. James C. Dahlberg, co-author.

Papers Read at Professional Meetings:

1975, "The Lisbon Burial - A Possible Middle Missouri Burial," read at the Plains Anthropological Conference, Lincoln, Nebraska, November.

1978, "Results of the Archaeology Survey of the Proposed Burlington Dam Project," read at the Association of Manitoba Archaeologists Conference, Winnipeg, Manitoba, May.

1979, "The Archaeology of the Anderson Tipi Ring Site, North Dakota," read at the Joint Plains-Midwest Archaeological Conference, Grand Forks, North Dakota, April.

Foreign Language: French

Research Interests: North American Prehistory, Early Hunters and their

Lithic Technology, Nomadic Peoples of the Plains

Memberships: Sigma Xi

Plains Anthropological Conference

Plains Anthropologist



VITA

Name: Wayne R. Roberson

Education: Wm. Fleming H.S., Roanoke, VA Grad. 1960

Univ. Virginia Branch, Roanoke, VA 1 yr. academic, 1961

Virginia Polytechnic Inst., Blacksburg, VA 2 yrs. Architecture

1961, 1963

Univ. Oklahoma, Norman, OK 1 sem. academic, 1964

Univ. Cincinnati, Cincinnati, OH 1 sem. Architecture, 1967

Univ. Cincinnati, Cincinnati, OH B.A. Anthropology, 1970

Univ. Texas at Austin, TX M.A. Anthropology, 1972

Present Position:

Historical and Archaeological Surveys, Inc.

2207 Springbrook Court Grand Forks, ND 58201 (701) 746-0810 or 775-5090

Research: (Supervised)

1968 Laboratory analysis (bio specimens, utilized flakes), Univ.
Cincinnati; R.I. Ford

1971-72 Archaeological survey, historic documents research, oral history interviews, Univ. Texas, Dept. Anthropology; T.N. Campbell and W.W. Newcomb, Jr.

1971-72 Photography, surveys, excavations, lab procedures, etc., Texas Historical Commission; C.O. Tunnell, J.D. Scurlock, and J. Malone

1972 Report preparation, Texas Historical Commission; J.D. Scurlock

1973 Field survey and test excavation, St. Augustine, TX; K. Gilmore

1973 Excavations, Spanish translations, and lab analysis, Texas Parks & Wildlife Dept., Austin, TX: D. Lorraine

1973 Historic documents research and report preparation, Texas Archeological Survey, Austin, TX; D. Dibble

Mondak Bridge Survey, McKenzie, Co., ND; Survey, test excavations, documents research, and oral history interviews; F. Schneider

(As Principal Investigator/Field Director)

1973-76 Ft. Lancaster St. Historic Site, TX; Excavations at military fort, materials' stabilization experiments, adobe reconstruction, documents research, oral history interviews, etc.

Ft. Leaton St. Historic Site, TX; Excavations at chapel of Mexican-Colonial trading post

Sabine Pass Battleground St. Historical Park, TX; Excavations at Civil War fort, documents research, oral history interviews

Ft. Richardson St. Historic Site, TX; Test excavation at Bakery of U.S. military fort

Palo Duro St. Park, TX; Test excavation at historic dugout

Sea Rim State Park, TX; Archaeological survey

San Jacinto Battleground St. Monument, TX; Test excavations and survey

Mineral Wells State Park, TX; Archaeological Survey

Landmark Inn St. Historic Site, TX; Excavations, documents research

Sam Bell Maxey House, Paris, TX; Excavations, oral history interviews

San Jose Mission, San Antonio, TX; Test excavations

Rice Family Log Home, Neches, TX; Survey and test excavation

McKinney Falls St. Park, TX; Excavations at Horse Trainer's house

(As Principal Investigator)

1973-76 Mission Rosario, TX; 17 weeks field excavations

Ft. Leaton St. Historic Site, TX; Excavations

Ft. Richardson St. Historic Site, TX; Excavations

Ft. McKavett St. Historic Site, TX; Excavations

Ft. Lipantitlan, TX; Test excavations and survey

San Jose Mission, San Antonio, TX; Excavations

Landmark Inn St. Historic Site, TX; Excavations

San Jacinto Battleground St. Monument, TX; Excavations

Mineral Wells St. Park, TX; Test excavations

L.B.J. St. Park, TX; Excavations

Ft. Griffin St. Park, TX; Excavations

Falcon Reservoir, TX; Survey

McKinney Falls St. Park, TX; Excavations and field school

(As Field Director)

1979-81 South Beulah Mine Extension, Mercer Co., ND; Test excavations and report preparation

Mondrian Tree Site, McKenzie County, North Dakota; Test excavations and report preparation

Northern Border Pipeline, North Dakota; Test excavations and report preparation

Northern Border Pipeline Crossing of Lake Oahe, Morton County, North Dakota; Excavations at 32M060, documents research, and oral history interviews

(Other Research)

1978-81 Mayan Calendar Studies

1981 Cultural Resource Assessment of the Proposed Mining Area, McLean County, North Dakota; The Falkirk Mining Company. Report preparation

Publications

- The Study of Extinct Rural Communities in the United States: A Test of Feasibility. M.A. Thesis, Univ. Texas, Austin.
- The Carrington-Covert House; Archeological Investigation of a 19th Century Residence in Austin, Texas. Texas Historical Commission, Office of the State Archeologist Reports, Number 25.
- Anglo-American Ceramics, in: Mission Rosario; Archeological Investigations 1973, by Kathleen Gilmore. Archeological Report 14, Part 1, Texas Parks and Wildlife Department, Austin.
- Archeological Narrative, in: Preservation Plan and Program for Rice Family Log Home, Houston County, Texas. Knox et al., Texas Parks and Wildlife Department, Austin.
- 1974 (Co-authored with Paul R. McGuff) Lower Sabine and Neches Rivers,
 Texas and Louisiana: A Study of the Prehistoric Resources in Areas
 under Investigation for Navigation Improvement. Research Report 46,
 Texas Archeological Survey, University of Texas, Austin.
- 1974 (Co-authored with J. David Ing) Fort Leaton State Historic Site:
 Summary of Archeological Investigations, and Excavation of Chapel,
 1973. Archeological Report Number 15, Texas Parks and Wildlife
 Department, Austin.
- 1976 Archeological Narrative, in: Preservation Plan and Program for Fort Lancaster State Historic Site, Crockett County, Texas. Knox et al., Texas Parks and Wildlife Department, Austin.
- 1976 (Co-authored with T. Holtzapple) Sabine Pass Battleground State Historical Park, Jefferson County, Texas; Archeological Investigations. Texas Parks and Wildlife Department, Austin.

1978 Mayan Calendar, An Almanac; Volume 1. Downhome General Store, Austin. West Study Area, South Beulah Mine Extension, Mercer County, North 1980 Dakota; Cultural Resources Survey and Test Excavations. Department of Anthropology and Archaeology, University of North Dakota. 1980 Archaeological Test Excavations at the Mondrian Tree Site (32MZ58), McKenzie County, North Dakota; with a Chapter on Faunal Analysis by Emily G. Lovick. Department of Anthropology and Archaeology, University of North Dakota. 1981 Mayan Calendar, 1981. Downhome General Store, Grand Forks. 1981 (Co-authored with Fred Schneider) Cultural Resource Inventory of the Mondak Bridge Project. Department of Anthropology and Archaeology, University of North Dakota. 1981 (Co-authored with Cindy Parish) Northern Border Pipeline, North Dakota: Historic Sites Testing and Evaluation. Department of Anthropology and Archaeology, University of North Dakota. 1981 (Co-authored with James C. Dahlberg, Larry Sprunk and Carl Freuden; Edited by Kent N. Good and Michele H. Schreiner) Final Report

> Historical and Archaeological Survey and Testing Project - Proposed Mining Area - Falkirk Mining Area - Falkirk Mine, McLean County, North Dakota. Historical and Archaeological Surveys, Inc. Grand

Professional Organizations

Forks.

Society for Historical Archaeology, 1973 to present Texas Archeological Society, 1974 to present Society for American Archaeology, 1974-1976 Society of Professional Archeologists, 1976 to present, with emphases:

> Field Research Collections Research Theoretical, Archival Research Archeological Administration Cultural Resource Management Historical Archeology

VITA

Name: James C. Dahlberg

Place of Birth: Butte, Montana

Present Position: Chief Archaeological Researcher and Photographer

Historical and Archaeological Surveys, Inc.

2207 Springbrook Court, Grand Forks, North Dakota

Education: 1968-1973, B.A., University of Montana

1978, M.A. Credits, Iowa State University

Previous Positions: 1973-1977, Research Assistant, Department of Anthro-

pology, University of North Dakota

1977-1978, Advanced Research Assistant and Graduate

Assistant, Iowa State University

1979, Advanced Research Assistant and Photographer, Department of Anthropology and Archaeology, University

of North Dakota

1979, Advanced Research Assistant and Photographer, Department of Anthropology, University of Montana 1979-present, Chief Archaeological Researcher and Photographer, Historical and Archaeological Surveys,

Inc.

Research:

Field - 1973, Archaeological Excavation of the Pretty Creek Archaeological Site, Pryor Mountains, Montana.

1974, Archaeological Survey of the Turtle River Watershed, North Dakota.

1974, Archaeological Survey of the Route of the Proposed Dome Pipeline, North Dakota

1974, Excavation of the "Fort Smith Burial," Yellow Tail Dam, Montana.

1975, Assistant Supervisor, Archaeological Test Excavation along the James River and Proposed Taayer Reservoir, South Central North Dakota.

1976, Archaeological Survey and Test Excavation of the James River Valley, Garrison Diversion Bank Stabilization Project, North Dakota.

1978, Archaeological Survey and Test Excavation of the Saylorville Reservoir Project, Central Iowa.

1978, Archaeological Survey and Photography of Falkirk Mining Project, Central North Dakota.

1979, Archaeological Excavation and Photography of Spring Creek Mining Project, South Central Montana.

Lab - 1973-1977, Research Assistant, Department of Anthropology and Archaeology, University of North Dakota, Grand Forks--involved in laboratory duties for a large number of field reports.

1977-1978, Ceramic analysis for the Department of Anthropology, Iowa State University.

1979, Advanced Research Assistant, Department of Anthropology and Archaeology, University of North Dakota, Grand Forks--involved in writing field report of the Pretty Creek Archaeological Site - 24CB4 & 5, Montana.

(Conducted for Historical and Archaeological Surveys, Inc.)

1980, Chief Researcher, Literature and Records Search, Pembilier Lake and Dam Flood Control Project, St. Paul District, Corps of Engineers. Pembina and Cavalier counties, North Dakota.

1980, Chief Researcher and Photographer, Cultural Resource Assessment of Twelve Known Archaeological and Five Known Historic Sites, Coteau Properties Company, Mercer County, North Dakota.

1980, Chief Researcher and Photographer, Cultural Resource Assessment of the Proposed State Highway 16 Improvement, State Highway Department, Golden Valley and McKenzie counties, North Dakota.

1980, Chief Researcher and Photographer, Cultural Resource Assessment of Two Sites Proposed for the Location of a Coal-fired Power Plant near Spiritwood, North Dakota.

1981, Chief Researcher, Mitigation Plan, Phase I for the Saskatchewan Intertie Transmission Line Right-of-Way, Northwestern North Dakota, Basin Electric Power Cooperative.

1981, Chief Researcher, Cultural Resource Assessment of the Proposed Mining Area, McLean County, North Dakota. The Falkirk Mining Company.

Publications:

1976, Archaeological Investigations in the LaMoure-Oakes Project Area, Garrison Diversion, North Dakota. National Park Service. Kent N. Good, William Tibesar, and Susan Vehik, co-authors.

1977, Archaeological Investigations of the Hendrickson III Site - 32SN403. LaMoure-Oakes Project Area, Garrison Diversion Unit, North Dakota. Bureau of Reclamation. Kent N. Good, Thomas Larson, Bruce Benz and Fred Schneider, co-authors.

1979, Archaeological Excavations at the Garrison Tipi Ring Site, 32ML117, McLean County, North Dakota: An Archaeological Salvage Project. Kent N. Good, co-author.

1979, Archaeological Survey of a Coal Mine Development for the Falkirk Mining Company, McLean County, North Dakota. Kent N. Good, co-author.

1980, A Cultural Resource Assessment of the Pembilier Lake and Dam Flood Control Project (A Literature and Records Search), Pembina River, Pembina and Cavalier Counties, North Dakota. U.S. Army Corps of Engineers, St. Paul District. Kent N. Good and Larry J. Sprunk, co-authors.

1981, Final Report Historical and Archaeological Survey and Testing Project, Proposed Mining Area - The Coteau Properties Company, Antelope Valley, Mercer County, North Dakota. Kent N. Good, Larry Sprunk, and John Logan, co-authors.

1981, Final Report Historical and Archaeological Survey and Testing Project - Proposed Mining Area - Falkirk Mine, McLean County, North Dakota. Wayne Roberson, Larry Sprunk, and Carl Freuden, co-authors. Edited by Kent N. Good and Michele H. Schreiner.

1981, Final Report Mitigation Plan Phase I for the Saskatchewan Intertie Transmission Line Right-of-Way, Northwestern North Dakota. Kent N. Good, co-author.

1981, The Pretty Creek Archaeological Site, 24CB4 & 5. Lawrence L. Loendorf and Lori O. Weston, co-authors.

Foreign Language: German and Spanish

Research Interests: Ceramic analysis from eastern North Dakota and the

the Missouri Trench

North American prehistory and artifact technology

Research photography

Norene Davis Roberts, President Historical Research, Inc. 5406 Penn Avenue South Minneapolis, MN 55419 (612) 929-4996 (Office) (612) 929-2921 (Home)

EDUCATION:

Ph.D., American Studies, University of Minnesota	1978
Minor: historical geography, Minnesota history	
M.A., American Studies, University of Minnesota	1972
Minor: art history, architectural history	
B.A., cum laude, English, University of Massachusetts, Amherst	1968
Graduate work in English literature, Oxford University, G.B.	1968

Dissertation: "An Early Political and Administrative History of the University of Minnesota, 1851-1884"

TEACHING, RESEARCH, AND ADMINISTRATIVE POSITIONS:

- 1968-75 Instructor and teaching assistant, English, American Studies, Continuing Education, University of Minnesota
- 1976 Instructor, Minnesota History, Honors Program, College of Liberal Arts, University of Minnesota
- 1975-77 Administrative and Research Fellow, Vice-President for Academic Affairs, University of Minnesota
- 1977-78 Undergraduate Advisor, American Studies, University of Minnesota

OTHER EMPLOYMENT:

- 1978-79 Historian, surveyor, architectural historian, State Historic Preservation Office, Minnesota Historical Society
- 1979 Freelance editor, Control Data Corporation Education Division

PROFESSIONAL ORGANIZATIONS:

American Association of State and Local History
American Institute of Historic Preservationists
American Studies Association
Council of Minnesota Archaeologists (Associate Member)
Hennepin County Historical Society
Minnesota Historical Society
National Trust for Historic Preservation
Society for the History of Technology
Phi Kappa Phi
Women Historians of the Midwest
Society of Architectural Historians
North Dakota Archaeological Society

RECENT HISTORICAL REPORTS AND PROJECTS:

- 1978 Historical surveys of Cass and Crow Wing counties, Minnesota; for the National Register of Historic Places; Minnesota Historical Society, State Historic Preservation Office
- First draft, <u>Historic Preservation for Minnesota Communities</u>; Minnesota Historical Society and Minnesota State Planning Agency (1980)
- Researcher, writer, for Seward Neighborhood History Committee; and two articles in <u>Seward Profile</u>, September, 1979, on the history and development of Seward Neighborhood, Minneapolis
- National Register Evaluation, <u>Historic Survey of the Cedar-Riverside Commercial Area</u>, for Cedar-Riverside Project Area Committee, <u>Hinneapolis</u>, <u>Minnesota</u>; <u>HUD funded</u>; <u>Historical Research</u>, <u>Inc.</u> and <u>Lynne Spaeth</u> Principal Investigator
- Forthcoming: "King's Fairs and other Minneapolis Expositions,"

 Hennepin County History, Hennepin County Historical Society,

 Minneapolis, Minnesota
- A Cultural Resource Records Check and Archaeological Investigation of the Minnesota River Valley Refuge Lands; U.S. Department of the Interior, U.S. Fish and Wildlife Service; Contract no. 14-14-003-79-0199; Archaeological Field Services, Inc.; Norene Roberts, Historian
- 1980 Feasibility study for a book-length history of the Blandin Foundation, Blandin Paper Company, and C.K. Blandin; Historical Research, Inc. and Lynne Spaeth for the Minnesota Historical Society

 Norene Roberts, Historian and co-researcher
- A Cultural Resources Literature Search and Records Review of the Upper Minnesota River Basin-- Southwestern Minnesota and Northeastern South Dakota; U.S. Army Corps of Engineers, St. Paul District; Contract no. DAWC-79-C-0199; Archaeological Field Services, Inc. Norene Roberts, Historian
- Author, forthcoming issue of Roots on Minnesota women; Education Division, Minnesota Historical Society
- Master Plan for an Interpretive Exhibit, Hubert H. Humphrey Institute of Public Affairs, University of Minnesota; Jeffrey A. Hess;
 Norene Roberts, Research historian

SSS-ARREAGES PROPERTY TO SECURIARY TO SECURITY TO SECU

- A Research, Planning, Evaluation and Design Study Regarding the Renovation and Adaptive Reuse of the Northern States Power Company, Main Street Hydro-Electric Station, St. Anthony Falls; A joint venture with Jeffrey A. Hess, Historical Consultant. Norene Davis Roberts, historian, History/ Industrial Archeology Component
- "Historical Perspectives on People Connected with National Register Sites in Dakota County"; Dakota County Museum; a National Endowment for the Humanities Youth Project.

 Norene Davis Roberts, Consulting Humanist Scholar
- 1981 Class I and II Cultural Resource Inventory of BLM-Administered Islands and Uplands in the State of Wisconsin; Department of the Interior, Bureau of Land Management, Lake States Office; A joint venture with Archaeological Field Services, Inc. Norene Davis Roberts, co-Principal Investigator, author
- Cultural Resource Investigation of the Grand Forks/East Grand Forks Urban Study and the East Grand Forks Flood Control Project; U.S. Army Corps of Engineers, St. Paul District; Under subcontract to Archaeological Field Services, Inc., G. Joseph Hudak, Principal Investigator. Norene Davis Roberts, historian, author
- Cultural Resources Literature Search and Records Review of Grafton, North Dakota Flood Control Project; U.S. Army Corps of Engineers, St. Paul District; Under subcontract to Archaeological Field Services, Inc. G. Joseph Hudak, Principal Investigator.

 Norene Roberts, historian
- 1981 Walking Tour of Lake Harriet, for the Minneapolis Public Library and Information Center; Minneapolis: Portrait of a Lifestyle, National Endowment for the Humanities.

 Norene Roberts, author
- A Cultural Resources Inventory of Lands in and adjacent to the city of Rochester, Minnesota. U.S. Army Corps of Engineers, St. Paul District; under subcontract to Archaeological Field Services, Inc. G. Joseph Hudak, Principal Investigator. Norene Roberts, historian/architectural historian, author
- Literature Search and Records Review of the Upper Mississippi River Basin: St. Anthony Falls to Lock and Dam 10. Contract No. DACW 37-80-D-0045, St. Paul District, U.S. Army Corps of Engineers; under subcontract to Archaeological Field Services, Inc. G. Joseph Hudak, Principal Investigator. Norene Roberts, author

- Intensive National Register Architectural and Historical Survey of the City of Grand Forks, North Dakota. Grand Forks Community Development Office and the North Dakota State Historic Preservation Office Norene Roberts, Principal Investigator
- Cultural Resources Investigation of Homme Reservoir,
 Walsh County, North Dakota. Contract No. DACW37-80-D-0045,
 St. Paul District, U.S. Army Corps of Engineers; under
 subcontract to Archaeological Field Services, Inc. G.
 Joseph Hudak, Principal Investigator.
 Norene Roberts, historian
- Cultural Resources Investigation of the Eau Galle Reservoir,
 Wisconsin. Contract No. DACW37-80-D-0045, St. Paul District,
 U.S. Army Corps of Engineers; under subcontract to Archaeological Field Services, Inc. G. Joseph Hudak, Principal
 Investigator. Norene Roberts, historian/architectural historian
- Historical Photo Exhibit, River Place Development, St. Anthony Falls, Minneapolis. East Bank Riverfront Partners. Norene Roberts, historian

RECENT HISTORICAL LECTURES AND PAPERS:

- 1979 "Resort Development in Northern Minnesota," paper delivered at the Annual Meeting of the Minnesota Historical Society 10/27
- 1979 "Minnesota Lumbering," lecture to the Minnesota History Work-shop, Minnesota Historical Society 7/24
- 1979 "Franklin Steele: Entrepreneur and Suttler," slide/lecture at Ft. Snelling, Minnesota Historical Society 7/19
- 1979 "Minnesota Architectural Development," slide/lecture at the Annual Meeting of the Crow Wing County Historical Society
- 1979 "The Architecture of River Towns in Southeastern Minnesota," slide/lecture to the Annual Meeting of the Winona County Historical Society 11/20
- 1979 Industrial archaeology and development of St. Anthony Falls, tour for Folwell Jr. High School, Minneapolis, Mn 9/19
- 1979 Walking tour of historic buildings for "Minneapolis: Portrait of a Life Style," National Endowment for the Humanities Learning Library Program and the Minneapolis Public Library 9/15
- 1980 "William Watts Folwell," lecture to Folwell Jr. High School,
 Minneapolis, Mn 2/20
- 1980 "Early Entrepreneurs in Minnesota"; Have Lunch with a Historian Program, Educational Division, Minnesota Historical Society and Ramsey County Historical Society 11/4

PROFESSIONAL REFERENCES:

Mr. G. Joseph Hudak, President Archaeological Field Services, Inc. 421 South Main Street Suite 421 F Stillwater, MN 55082 (612) 439-6782

Mr. Larry Johnson U.S. Department of the Interior Bureau of Land Management 125 Federal Building Duluth, MN 55802 (218) 727-6692

Mr. Jack Cann Cedar-Riverside Project Area Committee 2000 South Fifth Street Minneapolis, MN (612) 338-6375

Mr. Richard Westby, Director Matthews Neighborhood Center Seward Neighborhood 2318 29th Avenue South Minneapolis, MN 55406 (612) 721-6691

Mr. Robert W. Ready, AICP Executive Secretary Riverfront Development Coordination Board Room 235 City Hall Minneapolis, MN 55415 (612) 348-6559

XXXXXX